

UNEMPLOYMENT

REPORTS

OF THE

VARIOUS COMMITTEES OF THE NONPARTISAN
CONFERENCE COMPOSED OF CERTAIN MEM-
BERS OF THE HOUSE OF REPRESENTATIVES
CALLED FOR THE PURPOSE OF MAKING A
THOROUGH STUDY OF THE CAUSES OF UNEM-
PLOYMENT AND THE FUNDAMENTAL

MEASURES NECESSARY TO ACCOM-
PLISH ITS SOLUTION



UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1940

HOUSE RESOLUTION NO. 540

[Submitted by Mr. VOORHIS of California]

IN THE HOUSE OF REPRESENTATIVES,
June 22, 1940.

Resolved, That the manuscript of the reports of the various committees of the House Conference on Unemployment, composed of House Members who voluntarily made a general study of the causes of unemployment and the fundamental measures necessary to accomplish its solution, be printed as a House document.

Attest:

SOUTH TRIMBLE, Clerk.

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THE HOUSE CONFERENCE ON UNEMPLOYMENT

INTRODUCTORY

Deeply concerned by the continuing existence of widespread unemployment in the United States, 24 Members of the House sent out a call to all Members of the House on February 21, 1940, for a nonpartisan conference to make a thorough study of the causes of unemployment and the fundamental measures necessary to accomplish its solution. Over 70 Members responded and cooperated in the conference. For a period of over 3 months regular weekly meetings were held and Members diligently worked on the problem.

The following general officers were elected at the outset: Jerry Voorhis, chairman; Karl Mundt, vice chairman; John R. Murdock, secretary. Twelve committees were organized to study various phases of unemployment. Each committee elected its own chairman. This document consists of the reports of the committees together with the final report and program of the conference.

The members of the conference are glad to acknowledge the help of citizens from every part of the country who contributed their ideas by correspondence. Government agencies, especially the Legislative Reference Service of the Library of Congress, were also unfailingly cooperative.

The following Members of the House have cooperated in the work of the unemployment conference:

Alexander, John G. (Republican, Minnesota).

Allen, A. Leonard (Democrat, Louisiana).

Allen, Robert G. (Democrat, Pennsylvania).

Andersen, H. Carl (Republican, Minnesota).

Anderson, John Z. (Republican, California).

Angell, Homer D. (Republican, Oregon).

Beckworth, Lindley (Democrat, Texas).

Blackney, William W. (Republican, Michigan).

Boland, Patrick J. (Democrat, Pennsylvania).

Bryson, Joseph R. (Democrat, South Carolina).

Buckler, R. T. (Farmer-Laborite, Minnesota).

Burdick, Usher L. (Republican, North Dakota).

Byrne, William T. (Democrat, New York).

Cannon, Clarence (Democrat, Missouri).

Case, Francis (Republican, South Dakota).

Casey, Joseph E. (Democrat, Massachusetts).

Coffee, John M. (Democrat, Washington).

Crawford, Fred L. (Republican, Michigan).

Crowther, Frank (Republican, New York).

D'Alesandro, Thomas, Jr. (Democrat, Maryland).

Dingell, John D. (Democrat, Michigan).

Elliott, Alfred J. (Democrat, California).
Ellis, Clyde T. (Democrat, Arkansas).
Ford, Thomas F. (Democrat, California).
Gathings, E. C. (Democrat, Arkansas).
Gillie, George W. (Republican, Indiana).
Gwynne, John W. (Republican, Kansas).
Hall, Edwin Arthur (Republican, New York).
Harrington, Vincent F. (Democrat, Iowa).
Havener, Franck R. (Democrat, California).
Hill, Knute (Democrat, Washington).
Hinshaw, Carl (Republican, California).
Hull, Merlin (Progressive, Wisconsin).
Izac, Ed V. (Democrat, California).
Jacobsen, William S. (Democrat, Iowa).
Johns, Joshua L. (Republican, Wisconsin).
Johnson, Jed (Democrat, Oklahoma).
Keefe, Frank B. (Republican, Wisconsin).
Kefauver, Estes (Democrat, Tennessee).
Keller, Kent E. (Democrat, Illinois).
Landis, Gerald W. (Republican, Indiana).
Leavy, Charles H. (Democrat, Washington).
Lemke, William (Republican, North Dakota).
McKeough, Raymond S. (Democrat, Illinois).
McLeod, Clarence J. (Republican, Michigan).
Massingale, Sam C. (Democrat, Oklahoma).
Mundt, Karl E. (Republican, South Dakota).
Murdock, Abe (Democrat, Utah).
Murdock, John R. (Democrat, Arizona).
Nichols, Jack (Democrat, Oklahoma).
O'Connor, James F. (Democrat, Montana).
Oliver, James C. (Republican, Maine).
Pace, Stephen (Democrat, Georgia).
Patman, Wright (Democrat, Texas).
Rabaut, Louis C. (Democrat, Michigan).
Rich, Robert F. (Republican, Pennsylvania).
Sabath, Adolph J. (Democrat, Illinois).
Sandager, Harry (Republican, Rhode Island).
Schwert, Pius L. (Democrat, New York).
Scrugham, James G. (Democrat, Nevada).
Smith, Frederick C. (Republican, Ohio).
Smith, J. Joseph (Democrat, Connecticut).
Smith, Martin F. (Democrat, Washington).
Sparkman, John J. (Democrat, Alabama).
Springer, Raymond S. (Republican, Indiana).
Stefan, Karl (Republican, Nebraska).
Tenerowicz, Rudolph G. (Democrat, Michigan).
Terry, David D. (Democrat, Arkansas).
Tolan, John H. (Democrat, California).
Voorhis, Jerry (Democrat, California).
Welch, Richard J. (Republican, California).

REPORTS OF THE COMMITTEES

REPORT OF THE COMMITTEE ON AGRICULTURAL INCOME AND UNEMPLOYMENT

Mr. CHAIRMAN. The assignment of this subcommittee was to investigate, study and report on the question of unemployment as related to agriculture. The subcommittee is composed of Representatives Anderson of California, Elliott of California, Gillie of Indiana, Harrington of Iowa, Jacobsen of Iowa, Lemke of North Dakota, O'Connor of Montana, Terry of Arkansas, and Pace of Georgia.

We have given as much time to the investigation as our numerous other duties would permit and, while we have by no means exhausted the subject, we report and recommend as follows:

It is our definite conclusion that the questions of unemployment and farm income are tied together, interlocked and inseparable, and that there can be no real and permanent solution of unemployment until farm income is substantially increased and living conditions on the farm are substantially improved.

We ask, first, to invite your attention to the following table:

EXHIBIT A

Showing, for the years 1925 to 1939, inclusive, the total employed and unemployed each year and the percentage of unemployed:

Year	Total available labor force	Total employed	Total unemployed	Unemployment percentage of labor force	Federal Reserve Board index of production
	(1)	(2)	(3)	(4)	(5)
1925	45,000,000	44,152,000	817,000	1.8	104
1926	45,562,000	45,498,000	464,000	1.0	105
1927	46,939,000	45,319,000	1,620,000	3.5	106
1928	47,914,000	46,057,000	1,857,000	3.9	111
1929	48,354,000	47,928,000	426,000	.9	119
1930	49,925,000	45,216,000	3,309,000	7.8	96
1931	49,664,000	41,551,000	8,113,000	16.8	81
1932	50,182,000	37,704,000	12,478,000	24.9	64
1933	50,530,000	38,066,000	12,744,000	25.1	53
1934	51,402,000	41,002,000	10,400,000	26.2	79
1935	51,879,000	42,387,000	9,522,000	18.4	90
1936	52,382,000	44,783,000	7,599,000	14.5	105
1937	53,011,000	46,639,000	6,372,000	12.0	110
1938	53,698,000	45,600,000	10,098,000	18.8	85
1939	54,305,000	44,946,000	9,350,000	17.2	105
1930-1939	469,010,000	431,313,000	37,697,000	8.5	1
1930-1939	471	434	85	1.8	104
1930-1939	472	435	86	1.9	105
1930-1939	473	436	87	2.0	106
1930-1939	474	437	88	2.1	111
1930-1939	475	438	89	2.2	119
1930-1939	476	439	90	2.3	96
1930-1939	477	440	91	2.4	81
1930-1939	478	441	92	2.5	64
1930-1939	479	442	93	2.6	53
1930-1939	480	443	94	2.7	79
1930-1939	481	444	95	2.8	90
1930-1939	482	445	96	2.9	105
1930-1939	483	446	97	3.0	110
1930-1939	484	447	98	3.1	85
1930-1939	485	448	99	3.2	105
1930-1939	486	449	100	3.3	1

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EXHIBIT B

Showing, for the years 1910 to 1939, inclusive, the farm populations, the nonfarm population, the number of farms, and the indexes:

*Farm population, nonfarm population, and number of farms in the United States
Jan. 1, 1910-39¹*

Year	Farm popula-tion	Nonfarm popula-tion	Number of farms	Index numbers, 1910-14=100		
				Farm popula-tion	Nonfarm popula-tion	Number of farms
1910	32,077,000	59,340,000	6,362,000	99.6	94.9	99.1
1911	32,110,000	61,000,000	6,390,000	99.7	97.6	99.5
1912	32,216,000	62,270,000	6,420,000	100.0	98.6	100.0
1913	32,270,000	63,980,000	6,450,000	100.2	102.3	100.5
1914	32,323,000	66,000,000	6,480,000	100.4	105.6	100.9
1915	32,440,000	67,440,000	6,520,000	100.8	107.9	101.6
1916	32,536,000	68,750,000	6,560,000	101.0	110.0	102.2
1917	32,840,000	70,400,000	6,540,000	100.4	112.8	101.9
1918	31,770,000	72,320,000	6,520,000	98.7	115.7	101.6
1919	30,930,000	73,770,000	6,470,000	96.1	118.0	100.8
1920	31,614,000	74,247,000	6,448,000	98.2	118.8	100.4
1921	31,763,000	75,932,000	6,500,000	98.7	121.5	101.2
1922	31,749,000	77,800,000	6,510,000	98.6	124.5	101.4
1923	31,130,000	80,117,000	6,400,000	96.7	125.2	99.7
1924	30,817,000	82,549,000	6,380,000	95.7	132.1	98.9
1925	30,830,000	84,330,000	6,372,000	95.8	124.9	99.2
1926	30,619,000	86,166,000	6,340,000	95.1	137.8	98.7
1927	30,170,000	88,217,000	6,260,000	93.7	141.1	97.5
1928	30,188,000	89,735,000	6,270,000	93.8	143.5	97.7
1929	30,220,000	91,029,000	6,200,000	93.9	145.6	98.0
1930	30,169,000	92,328,000	6,289,000	93.7	147.7	98.0
1931	30,497,000	93,190,000	6,390,000	94.7	149.1	99.5
1932	30,971,000	93,698,000	6,520,000	96.2	140.7	101.7
1933	31,693,000	93,694,000	6,720,000	96.4	140.9	104.7
1934	31,770,000	94,464,000	6,770,000	98.7	151.1	105.4
1935	31,801,000	95,351,000	6,812,000	98.8	152.5	106.1
1936	31,809,000	96,215,000	6,830,000	98.8	153.9	106.4
1937	31,729,000	97,148,000	6,820,000	98.5	155.4	106.2
1938	31,819,000	97,999,000	6,850,000	98.8	156.8	106.7
1939	32,056,000	98,870,000	6,920,000	99.6	158.2	107.8

¹ Population estimates for the years 1911-19 and number of farm estimates for all except census years have been rounded to the nearest 10,000.

² Preliminary.

EXHIBIT C

Showing, for the years 1910 to 1919, inclusive, the birth and death rates of the whole population and of the farm population, and the excess of births over deaths on the farms:

Birth and death rates per 1,000, United States and farm population, and natural increase of the farm population, 1910-19

Year	United States population		Farm population			
	Birth rate	Death rate	Birth rate (115 per cent of column 2)	Death rate (88 per cent of column 3)	Natural increase rate (column 4 minus column 5)	Excess of births over deaths
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1910	27.5	15.4	31.6	13.6	18.0	280,000
1911	27.6	14.6	31.7	12.8	18.9	610,000
1912	27.6	14.3	31.7	12.6	19.1	620,000
1913	27.5	14.4	31.6	12.7	18.9	610,000
1914	28.1	13.9	32.3	12.2	20.1	620,000
1915	27.8	13.8	32.0	12.1	19.9	650,000
1916	27.6	14.3	31.7	12.6	19.1	620,000
1917	27.3	14.5	31.4	12.8	18.6	600,000
1918	27.1	18.5	31.2	16.3	14.9	470,000
1919	25.1	13.3	28.9	11.7	17.2	340,000
Total						5,950,000

EXHIBIT D

Showing, for the years 1909 to 1939, inclusive, the total national income, the farm and nonfarm incomes, and the percentage of farm income. The figures for farm incomes are for cash income only—purchasing power—and do not include food and feed consumed on the farm; nor do they include, due to their uncertain status, the parity and conservation and other benefit payments made to some farmers during the last few years:

National income, United States 1909-39

Year	Total	Nonfarm ¹	Farm ¹	Farm as a percentage of total
1909	\$26,415,000,000	\$22,070,000,000	\$4,345,000,000	16.4
1910	28,114,000,000	23,474,000,000	4,540,000,000	16.5
1911	28,489,000,000	24,251,000,000	4,228,000,000	14.8
1912	30,394,000,000	25,798,000,000	4,596,000,000	15.1
1913	32,133,000,000	27,560,000,000	4,575,000,000	14.2
1914	31,919,000,000	27,367,000,000	4,552,000,000	14.3
1915	33,210,000,000	28,404,000,000	4,806,000,000	14.5
1916	39,036,000,000	33,198,000,000	5,838,000,000	15.0
1917	47,385,000,000	38,482,000,000	5,903,000,000	13.8
1918	55,357,000,000	44,880,000,000	10,501,000,000	19.0
1919	60,354,000,000	48,785,000,000	11,598,000,000	19.2
1920	64,552,000,000	56,478,000,000	8,074,000,000	12.5
1921	54,210,000,000	49,883,000,000	4,327,000,000	8.0
1922	57,546,000,000	52,109,000,000	5,437,000,000	9.4
1923	66,171,000,000	59,620,000,000	6,551,000,000	9.9
1924	68,824,000,000	61,888,000,000	6,926,000,000	10.1
1925	73,278,000,000	65,852,000,000	7,426,000,000	10.1
1926	76,564,000,000	68,395,000,000	6,869,000,000	9.1
1927	76,457,000,000	69,518,000,000	6,839,000,000	8.9
1928	78,117,000,000	71,209,000,000	6,908,000,000	8.8
1929	80,372,000,000	73,542,000,000	6,830,000,000	8.5
1930	75,571,000,000	68,456,000,000	5,115,000,000	7.0
1931	62,384,000,000	59,303,000,000	3,081,000,000	4.9
1932	48,355,000,000	46,551,000,000	1,804,000,000	3.7
1933	45,771,000,000	43,174,000,000	2,597,000,000	5.7
1934	52,540,000,000	49,164,000,000	3,376,000,000	6.4
1935	57,007,000,000	52,770,000,000	4,237,000,000	7.4
1936	66,722,000,000	61,599,000,000	5,123,000,000	7.7
1938	64,687,000,000	60,236,000,000	4,451,000,000	6.9
1939 ²	67,608,000,000	63,150,000,000	4,458,000,000	6.6

¹ National income available for living. For method of derivation see the Agricultural Situation, May 1, 1937, p. 19.

² Preliminary estimates.

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EXHIBIT E

Showing, for specified years, the earnings of certain skilled wage earners and the comparison of such wages with the parity rates. The parity period as fixed by law August 1909 to July 1914:

Weekly earnings in building and construction, and by factory workers, 1913, 1919, and 1939

Occupation	1913 (May 15)			1919 (May 15)			1939 (June 1)				
	Wages per hour	Hours worked per week	Earnings per week ¹	Wages per hour	Hours worked per week	Earnings per week ¹	Estimated parity earnings ²	Wages per hour	Hours worked per week	Earnings per week ¹	Estimated parity earnings ²
Plumbers.....	\$0.578	45.2	\$26.13	\$0.760	44.2	\$33.90	\$44.71	\$1.526	37.9	\$57.94	\$37.24
Electricians.....	.518	45.4	23.52	.735	43.7	32.99	40.24	1.532	37.6	57.60	38.52
Stonemasons.....	.567	44.9	25.46	.764	44.5	34.00	43.56	1.544	38.8	50.91	36.28
Steam fitters.....	.566	44.6	24.80	.753	43.4	32.68	42.45	1.589	37.8	60.06	38.34
Carpenter.....	.516	44.7	23.07	.759	43.8	33.24	39.47	1.401	38.7	54.22	32.57
Painters.....	.485	45.8	22.21	.732	45.1	33.01	38.00	1.365	36.4	49.40	31.65
Bricklayers.....	.600	44.1	30.43	.883	43.6	38.50	52.07	1.602	38.4	65.82	43.36
Factory workers.....	(2)	41.2	21	(2)	40	24.00	20.60	(2)	(2)	24.34	17.14

¹Weekly earnings in building and construction computed from union wage rates and hours worked per week from data furnished by the Bureau of Labor Statistics.

²Computed by multiplying weekly earnings in building and construction on May 15, 1913, by the index of the cost of living for June 1919 of 171.1 and for June 1939 of 142.5 (1913=100) compiled by the Bureau of Labor Statistics.

³Not available.

⁴Average for the years 1914 (1913 not available) and 1919 estimated by the Bureau of Labor Statistics.

⁵Computed by multiplying weekly earnings in 1914 by the index of the cost of living for June 1919 of 168.7 and for June 1939 of 140.4 (1914=100).

⁶Average of January–November 1939, estimated by the Bureau of Labor Statistics.

EXHIBIT F

Showing the prices actually received by farmers in March of this year and the price they should be receiving in order to receive parity prices. There has been a very substantial break in prices actually received during the last 10 days and the disparity between actual and parity prices is now much greater than that shown by this table:

Prices of farm products

[Estimates of average prices received by producers at local farm markets based on reports to the Agricultural Marketing Service; average of reports covering the United States weighted according to relative importance of district and States]

Product	5-year average, August 1909–July 1914	March average 1910–14	March 1939	February 1940	March 1940	Parity price, March 1940
Cotton, pound.....	cents	12.4	12.4	8.31	10.0	10.0
Corn, bushel.....	do	64.2	61.3	44.4	54.7	58.0
Wheat, bushel.....	do	88.4	88.9	56.7	94.1	86.0
Hay, ton.....	dollars	11.87	12.06	8.67	8.10	8.23
Potatoes, bushel.....	cents	69.7	67.5	64.6	75.2	77.0
Oats, bushel.....	do	39.9	40.5	26.9	37.7	38.6
Soybeans, bushel.....	dollars	(1)	(1)	.73	.96	1.01
Peanuts, pound.....	cents	4.8	4.5	3.4	3.6	3.6
Beef cattle, hundredweight.....	dollars	5.21	5.20	7.00	6.84	7.00
Hogs, hundredweight.....	do	7.23	7.41	7.10	4.97	4.87
Chickens, pound.....	cents	11.4	11.4	14.3	12.2	12.5
Eggs, dozen.....	do	21.5	19.6	16.0	20.2	15.4
Butterfat, pound.....	do	26.8	27.1	27.7	20.7	26.4
Wool, pound.....	do	18.3	18.7	20.0	27.8	27.3
Veal calves, hundredweight.....	dollars	6.75	6.92	8.80	8.80	8.81
Lambs, hundredweight.....	do	5.87	6.22	7.43	7.61	8.05
Horses, each.....	do	136.60	138.40	83.00	78.30	78.30

¹Prices not available.

²Adjusted for seasonality.

EXHIBIT G

Showing, for 1910 to 1938, inclusive, farm real estate taxes and interest charges:
Total farm real estate taxes and farm mortgage interest charges payable 1910-38

Year	Farm real estate taxes	Farm mortgage interest charges	Farm real estate taxes and farm mortgage interest charges
1910	\$166,000,000	\$203,000,000	\$369,000,000
1911	183,000,000	225,000,000	408,000,000
1912	191,000,000	232,000,000	443,000,000
1913	218,000,000	275,000,000	494,000,000
1914	222,000,000	294,000,000	516,000,000
1915	243,000,000	314,000,000	557,000,000
1916	261,000,000	341,000,000	561,000,000
1917	262,000,000	373,000,000	575,000,000
1918	311,000,000	417,000,000	728,000,000
1919	305,000,000	475,000,000	780,000,000
1920	483,000,000	574,000,000	1,057,000,000
1921	510,000,000	653,000,000	1,163,000,000
1922	509,000,000	680,000,000	1,189,000,000
1923	514,000,000	679,000,000	1,195,000,000
1924	511,000,000	647,000,000	1,158,000,000
1925	517,000,000	612,000,000	1,129,000,000
1926	506,000,000	598,000,000	1,124,000,000
1927	543,000,000	593,000,000	1,135,000,000
1928	556,000,000	590,000,000	1,146,000,000
1929	567,000,000	582,000,000	1,149,000,000
1930	565,000,000	572,000,000	1,138,000,000
1931	526,000,000	559,000,000	1,084,000,000
1932	460,000,000	534,000,000	994,000,000
1933	509,000,000	483,000,000	992,000,000
1934	534,000,000	446,000,000	980,000,000
1935	584,000,000	411,000,000	995,000,000
1936	597,000,000	383,000,000	980,000,000
1937	410,000,000	370,000,000	780,000,000
1938	407,000,000	357,000,000	764,000,000

EXHIBIT H

A list of 19 laws enacted by Congress fixing rates and charges or guaranteeing minimum prices. To this should be added the numerous acts of Congress fixing tariff rates and exempting city, county, State, and Federal bonds from taxation. Every one of these laws has in some degree increased the cost of everything the farmer must buy:

Act of October 15, 1914 (38 Stat. 730, ch. 323, p. 2): Supplemented Anti-trust Act of 1914, prohibiting difference in prices to purchasers to lessen competition, etc.

Act of September 7, 1916 (39 Stat. 735, p. 18; U. S. C. 46: 817): Shipping Board (i. e., Maritime Commission, at present) authorized to prescribe just and reasonable rates, fares, and charges of common carriers by water in interstate commerce.

Act of February 28, 1920 (41 Stat. 483-487; U. S. C. 49: 6, 15): Interstate Commerce Commission authorized to fix charges, etc. of common carriers in interstate commerce, etc. (Amended by act of March 4, 1927, 44 Stat. p. 2).

Act of June 10, 1920 (41 Stat. 1073, pp. 19, 20; U. S. C. 16: 812, 813): Federal Power Commission authorized to regulate charges of licenses under Federal Power Act, if no State commission has such regulatory power.

Act of August 15, 1921 (42 Stat. 166-167; U. S. C. 7: 212): Secretary of Agriculture authorized to prescribe charges, etc., of stockyard owners or market agencies in certain cases.

Act of September 21, 1922 (42 Stat. 1000, p. 5 (c, d.): Authorized Secretary of Agriculture to designate as "contract markets," governing boards which prevent misleading reports or manipulation of prices of grain in interstate commerce.

Act of June 25, 1926 (44 Stat. 769, ch. 674): Provided that owners of potash rights agree to market the potash produced, at a reasonable price.

Act of May 18, 1933 (48 Stat. 65, p. 12; U. S. C. 16: 831k): Tennessee Valley Authority to fix schedule of resale prices in contracts for sale of surplus electric power.

Act of June 19, 1934 (48 Stat. 1072, p. 205; U. S. C. 47: 2005): Federal Communication Commission authorized to prescribe charges for communication by wire or radio or transmission of energy.

Act of June 6, 1934 (48 Stat. 889, p. 9) (Securities and Exchange Act of 1934): Prohibited manipulation of security prices.

Act of August 14, 1935 (49 Stat. 649, ch. 532: U. S. Code Supp. 7:218c): Act of August 15, 1921, above, made applicable to live-poultry dealers and handlers.

Act of June 30, 1936 (49 Stat. 2036, ch. 881, 2039, p. 6; U. S. Code Supp. 41: 35, 40): Secretary of Labor to determine minimum wages to be paid by Government contractors.

Act of April 26, 1937 (50 Stat. 77-81; U. S. Code Supp. 15:833): National Bituminous Coal Commission authorized to prescribe maximum and minimum coal prices for code members.

Act of June 3, 1937 (50 Stat. 247 (f); U. S. Code Supp. 7:808c): Secretary of Agriculture authorized to fix prices for milk.

Act of August 17, 1937 (50 Stat. 693, VIIID): Amended antitrust laws relating to contracts in restraint of trade by providing that contracts prescribing minimum prices which are lawful in intrastate transactions are not to be rendered illegal in the resale of such commodity at the minimum price elsewhere.

Act of September 1, 1937 (50 Stat. 904, p. 201) (Sugar Act of 1937): Provided for regulation of sugar prices to consumers.

Act of June 21, 1938 (52 Stat. 822-824; U. S. Code Supp. 15:717c, 717d): Federal Power Commission authorized to fix charges of natural-gas companies.

Act of June 23, 1938 (52 Stat. 955, p. 5; U. S. Code Supp. 46:1131): Maritime Commission authorized to prescribe minimum-wage scales in contracts under Merchant Marine Act. Same (p. 964, p. 43; U. S. Code Supp. 46:845a): Maritime Commission authorized to prescribe rates, etc., of carriers subject to Intercoastal Shipping Act.

Act of June 25, 1938 (52 Stat. 1064, p. 8; U. S. Code Supp. 29:208): Administrator of Wage and Hour Division authorized to fix minimum wages.

From these exhibits the following facts appear:

1. That there are just about as many people at work today as during the fairly normal and fairly good year 1926. Yet during that year the unemployed was less than 500,000, or only 1 percent, while last year the unemployed numbered nearly 10,000,000, or over 17 percent.
2. That the unemployed today represents for the most part the natural increase in the number of employables.

We believe that this increase comes mainly from three sources, namely, the natural increase in population, the admission or illegal entry of foreigners, and the increase of the number of women who have entered or seek to enter industrial pursuits.

3. That of the increase from 1926 to 1939 of approximately 9,000,-000 employables at least two-thirds, or between 6,000,000 and 7,000,-000, come from the farms. It appears that during the 10 years 1910 to 1919 there was an average annual excess of 595,000 in births over deaths among the farm population. Your committee does not have the figures for the period 1926 to 1939, but the most reliable estimates furnished show an excess of births over deaths among the farm population during that period of at least 500,000 each year.

As the farm population has practically stood still during the last 30 years, at 32,000,000, it necessarily follows that this annual excess of births over deaths among the farm population has left the farm.

4. That while the national income during the last 30 years has increased 250 percent, from \$26,415,000,000 to \$67,608,000,000, the farmers' cash income in 1939 was practically the same as it was in 1909, and instead of being 16.4 percent of the total, as in 1909, the farmers' cash income from the sale of his crops had dropped to 6.6 percent. That means that 25 percent of our total population must try to live on only 6.6 percent of the total national income. Do you wonder that they leave the farm as quickly as they can get away?

5. That, at the same time, the small percent of the national income which the farmers receive will today buy less than it would in 1909.

This is due to the fact that everything the farmer must buy in the way of necessities costs him considerably more than during the parity period, 1909 to 1914, while he must today sell his commodities for less than he received during that period. The principal increase in cost of necessities to the farmers is due to the increase in the cost of processing or manufacturing those necessities. For example, a pair of overalls costs from 30 to 50 percent more today than in 1913, and yet for the cotton of which the overalls are made the farmer is paid considerably less today than in 1913. During that time wages in the manufacturing plants have gone up from 50 to 250 percent while the raw material supplied by the farmer has gone down from 10 to 50 percent.

This committee favor increases in wages and better living conditions for those who labor in our plants and factories, but feels that similar and compensating returns from the sale of their crops should go to those who labor in the fields to produce the food and fiber to sustain the Nation.

6. Your committee is thoroughly convinced that unemployment cannot be solved, that prosperous conditions cannot be realized, merely by increasing industrial wages or merely by seeking to restore more prosperous conditions in the cities and industrial centers. Our investigation goes back over 100 years and it appears, without exception, that whenever wages or conditions improve in the towns and cities there is an immediate and substantial rush from farm to city. That is but the human, the natural, thing. Today the farmer is receiving for his crops a price which returns him a wage for his labor of from 5 to 20 cents an hour. Any man who seeks to improve his condition, who has any respect for his wife, who wants an education and decent clothing for his children, will move where he is guaranteed at least 30 cents an hour and can have the benefits of unemployment insurance and old-age security.

7. On the other hand, your committee is convinced that the greatest potential market in the world today is the American farmer, and that if given a proper return for his crops, if given the purchasing power, he will go into the markets of this nation and will make necessary the employment of millions of additional workers in our manufacturing and industrial plants. Agriculture is the foundation of all civilization; it is the rock upon which all true progress and prosperity must build; it provides the raw materials which are the basis of all industrial employment; it is the key to many of our present-day problems, including unemployment.

Respectfully submitted,

STEPHEN PACE, *Chairman.*

VINCENT F. HARRINGTON.

J. Z. ANDERSON.

DAVID D. TERRY.

JAMES F. O'CONNOR.

GEO. W. GILLIE.

W. S. JACOBSEN.

A. J. ELLIOTT.

REPORT OF THE COMMITTEE ON FARM TENANCY AND UNEMPLOYMENT

The Committee on Farm Tenancy of the House unemployment bloc in submitting its final report recommends a program of action capable of accomplishment in the third session of the Seventy-sixth Congress. Agricultural unemployment is a pressing problem today; and, in order to meet the problem today, the committee has found it advisable to concentrate its efforts on that solution which may most readily be enacted into law.

The committee finds that any adopted solution of the farm tenancy problem involves:

1. Maintaining the present farm owner in his status of ownership.
2. Aiding the present part-owner and tenant to acquire ownership of a farm large enough to support his family.
3. Taking action to alleviate the conditions of the unemployed and migrant farm laborers.

FARM OWNERS

The farm owner has an important place in the study of farm tenancy. Once a farmer obtains ownership of his property, it is essential that he maintain that ownership; it is essential that he stay on the top rung of the agricultural ladder and not descend to the lower rungs, where his presence would further complicate the tenancy situation.

In order to assure maintenance of the status of the farm owner, it is necessary to assure him credit at low rates of interest, available at times of greatest need, which are likely to be times when least collateral and security are available. In 1930, when the last complete census was taken, 23.8 percent of all farm operators were owners with mortgages on their farms. Farm mortgage debt at that time amounted to \$9,214,278,000, which was distributed over 2,523,223 farmers.

In order to accomplish the end of more liberal farm credit, the committee recommends consideration of the Wheeler-Bankhead-La Follette-Jones farm credit bill (H. R. 8748, S. 3509). This bill would (a) reduce to 3 percent the interest rates of Federal land-bank and Land Bank Commissioner loans, and provide for the refinancing of all farm-loan bonds which bear interest at a rate higher than the average rate of interest of other United States obligations; (b) remove the requirement that borrowers subscribe to the capital stock of Federal land banks or national farm-loan associations, and provide for the retirement of such capital stock; (c) provide for the refinancing of farm debt mortgages over a period of 40 years; (d) limit the institution of foreclosure proceedings and the taking of deficiency judgments, and allow repurchase of foreclosed property and reamortization over a period of 40 years; (e) increase the functions and responsibilities of national farm-loan associations and county committees of farmers in respect to debt adjustment or refinancing.

Hearings on this bill are now being held before the House Agriculture Committee. No hearings have been held as yet by the Senate Banking Committee, to which the bill has been referred. The Secretary of Agriculture and the Farmers Union favor the bill; the Farm Bureau Federation and the Grange oppose it.

FARM TENANTS

Although in all areas of the United States there are notable instances of desirable relationships between tenants and landlords, tenancy conditions, in many cases and areas, are unsatisfactory to both tenant and landlord, are condemned by both, and are objectionable from the point of view of social welfare.

Tenancy has increased from 25 percent of all farmers in 1880 to 42 percent in 1935. Because of debts, the actual equity of operating owners is far less than these figures indicate. About two-thirds of the tenants and croppers in the United States are located in the South. The problem there, it should be noted, is not a race problem, for of southern tenants and croppers two-thirds are white and only one-third are Negroes.

The Congress has recognized the need for remedial legislation in this field by the passage of the Bankhead-Jones Act. Under title 1 of this act a total of \$75,000,000 has been appropriated in 3 years for tenant purchases. The results of the program thus far undertaken have demonstrated the wisdom of Congress in tackling the problem. It is apparent, however, that the present act is inadequate to cope actively with the tenancy problem. Its coverage is much too limited. Assuming an appropriation equal to the maximum authorization under the present act, only 10,000 loans can be made in any one fiscal year.

In order to enable the Government, therefore, to assist the greatly increased number of farm tenants to become farm owners, this committee recommends the consideration of the Bankhead-Jones amendment (S. 1836) to the present Farm Tenant Act. This amendment would make possible an expansion of the tenant-purchase program through the utilization of private funds. In brief outline the proposal contained in the amendment, as reported out by the House Agriculture Committee, can be summarized as follows: (1) A revolving fund is created to provide for the capital expenditures required under the amendment; (2) mortgages in which private lenders make the investment may be insured until June 30, 1945; (3) loans may be made by the Secretary of Agriculture if the private market does not readily absorb the total amount allotted to a State; (4) mortgages may be insured or taken with a total principal obligation of \$350,000,000. That amount is divided equitably among the States and Territories; (5) long-term (40-year) low-interest-rate (3-percent) mortgages are provided for; (6) insurance and service charges are to be made up by a 1-percent charge paid by the borrowers; (7) funds are available to enable persons to acquire farms and to enable existing owners to refinance existing indebtednesses; (8) county committees select the borrowers and the farms. Emphasis is on the diligent person and the family-size efficiency farm unit; (9) payment to the lender under the insured mortgage is assured periodically and upon default. On default the lender receives debentures with a 3-percent interest rate guaranteed as to principal and interest by the United States; (10)

variable payments may be made by the borrower to the Secretary of Agriculture; (11) the principal obligation of the mortgages, which may be insured or taken by the Secretary, cannot exceed 90 percent of the reasonable value of the farm and repairs and improvements on it, except that the 90-percent figure can be exceeded if the borrower has work stock, farm equipment, farm livestock, and farm supplies equal to not less than 15 percent of the value of the farm, and repairs and improvements.

This bill has passed the Senate and has been reported favorably by the House Committee on Agriculture, although no rule has been granted as yet. The bill, as reported by the House committee, contains three provisions to which this committee takes exception:

1. *Amount of principal obligation that may be insured.*—The Senate bill provides that mortgages may be insured up to 100 percent of the value of the farm. The bill, as reported by the House committee only allows 90-percent valuation, and thus requires a 10 percent down payment. The committee feels that this down payment may act as an unreasonable obstruction to the acquisition of farms by tenants and recommends that the Senate proposal be adopted in this respect. The committee feels strongly that the Senate provision should apply to former owners who have lost their farms through no fault of their own. To require a down payment at the very start of rehabilitation would in all probability make the final loss of such farm absolute.

2. *Interest rate.*—Both the Senate and the House committee versions of the bill call for a 3 percent interest rate. Both versions authorize the Secretary of Agriculture to prescribe initial fees for inspection, appraisal, and other charges, which may be included in the principal obligation of the mortgage; and to require payment of such deficiency charges and default reserves as he finds necessary. The Senate bill prohibits the Secretary of Agriculture from making any premium charge on the insurance of mortgages. The House committee version, on the other hand, requires the Secretary to collect from the borrower an additional charge of 1 percent per annum on the undue obligation for insurance and administrative expenses. One half of this 1 percent charge is for insurance, the other half, for administrative expenses. Thus, according to the House committee version, in addition to paying all initial inspection, appraisal, and other fees, the tenant must pay annual interest at a rate of 4 percent (3 percent regular charge plus 1 percent for insurance and administrative expenses). The committee feels that this rate is too high. The purpose of the bill is to increase ownership of land by farm tenants. There can be no justification of an interest rate which is so high as to thwart this purpose.

3. *Present farm-tenancy program and appropriations.*—Both versions of the bill contemplate a continuation of the present loan program under title 1 of the Bankhead-Jones Act in addition to the new program outlined in this bill. The committee feels that it may be preferable to cease activity under the old program and to transfer any funds available for it to the operation of the program contemplated in this bill.

FARM LABORERS

More than one-fourth of all persons gainfully employed in agriculture in 1930 were farm-wage laborers. Some of these laborers succeed in climbing into the status of tenants or even owners. In depression periods, however, large numbers of tenants and small owners overburdened with debt become migratory laborers. Most farm laborers have uncertainty of employment as their general lot; their earnings and standard of living are correspondingly low. But the situation of the hand laborers in intensive agriculture is especially precarious. The conditions under which they work and live have already promoted strife in widely scattered areas. West of the Mississippi the number of migratory laborers has recently been augmented by farm families from drought areas.

The committee is of the opinion that the measures it has recommended for the alleviation of the conditions surrounding farm owners and farm tenants will of themselves alleviate to some degree the difficulties of the unemployed and migrant farm laborers. If pressure is relieved on the upper rungs of the agricultural ladder, there will be a greater chance for those on the lowest rung to begin to climb.

However, the committee does not pretend to believe that the legislation it has recommended in aid of farm owners and tenants will of itself completely solve the pressing problem which the unemployed and migrant farm laborer presents. For this reason, the committee recommends the following action in reference to Emergency-relief appropriations:

The committee recognizes the need for such relief appropriations for farm laborers. The committee is especially interested in, and urges an increase in the number of, migrant labor camps operated with relief funds by the Farm Security Administration. The committee wishes to go on record as favoring farm relief appropriations for the next fiscal year to an amount at least equal to those of the present fiscal year. For the administration of these relief funds, the committee insists that drought, flood, or other scourges, which destroy crops and property and render citizens of this country unable to care for themselves, and which involve the expenditure of funds in excess of those which local, county, and State units can provide, must be classified as national a calamity or disaster, and as such must receive the consideration of the Congress. In the administration of this form of relief, all should be treated fairly and justly without regard to any set quotas for States or otherwise.

(Signed) **USHER L. BUDICK.**

KARL STEFAN.

E. C. GATHINGS.

H. CARL ANDERSEN.

JOHN SPARKMAN.

JACK NICHOLS.

REPORT OF THE COMMITTEE ON FOREIGN TRADE AND UNEMPLOYMENT

In respect to foreign trade, the United States is in a somewhat different position from any other nation of the world in that our country is very nearly self-sufficient. Our economy is a balanced one as between agriculture and industry, and we have an abundance of most natural resources. Our fertile soil is capable of producing crops that can be raised in the sub-Tropical and the Temperate Zones. Availability of both fuel and falling water as sources of power have made possible the development of manufacturing. We have multiplied our abilities by the use of electricity and have devised ways of producing in quantity at ever-decreasing cost. Excepting a certain few natural resources that are not found here and certain crops either requiring tropical conditions for growth, or which are of better quality when grown elsewhere, we can and do sustain ourselves. Those things which we need and cannot or do not produce are principally, rubber, coffee, tea, spices, silk, certain tropical fruits and nuts, and tin, manganese, chrome, nickel, platinum and diamonds, hand-made laces and embroideries, etc.

Our need to trade with foreign lands can be measured by our need for the things we cannot or for sufficient reasons do not produce at home.

In the 150 years of our nationhood, we have made a transition from an almost exclusively agricultural economy to combined agricultural and industrial economy. If we exercised our genius to the utmost while using our natural resources of fuel and power we could probably further expand our industry and contract agriculture, but the condition necessary to safety in such a further transition is world peace guaranteed. Predominantly industrial countries must be insured against the cutting off of supplies. Therefore, until the conditions of world peace can be established and its permanence demonstrated we may consider ourselves most fortunate in having a well-balanced economy and an abundance of our essential requirements.

An agricultural country exports its surpluses and imports an equal value of manufactured goods. An industrial country imports raw materials, manufactures them and trades the goods abroad for more raw materials and for foodstuffs which it consumes. Any essentially "one purpose" country, so to speak, must balance its needs by foreign trade in large volume. Such countries are dependent upon world markets.

While the population of the United States has increased 50 percent, the number of persons engaged in agriculture has remained stationary. Our added population has engaged in industry and commerce, not in agriculture. Whereas we formerly produced large agricultural surpluses and traded them abroad for manufactured goods and other requirements, we can now produce both agricultural and industrial surpluses for exchange abroad, but we have relatively less require-

ments from abroad. We, therefore, find ourselves in the dilemma of wanting to sell both industrial and agricultural surpluses abroad in large volumes for which we are quite naturally disinclined to accept payment in either kind.

Any country wishing to dispose of surpluses abroad must be willing to accept payment in some form. After we have accepted as much rubber and coffee, silk and tin, etc., as we need and can use, further acceptance of these items merely builds surpluses of them. Acceptance of other items, those that are in direct competition with our own industry and agriculture, serves to aggravate an already bloated condition. We can grant credits but that is not a solution; it merely postpones the day of reckoning. The experience of the United States in financing exports through the granting of long-term credits is almost wholly unsatisfactory. This experience shows that such exports so financed constitute a gift, to all purposes.

We can accept the precious metals, gold and silver, but we have already accumulated a supply that is far in excess of our needs and a menace to our well-being. In the present state of the world, it is impossible to gage the value of gold on what might be termed a "free market," but from such production cost estimates as are available, it would appear that gold on such a free market is worth approximately \$15 per ounce. Consequently, to accept foreign gold at \$35 per ounce in payment of trade balances constitutes a net loss to the American producer in the neighborhood of 50 percent on exports so financed.

In either of these cases, we are sending from our country billions of dollars' worth of man and machine hours of labor and of land use without receiving in payment therefor anything that can be used or distributed among our people. While exports so financed apparently yield employment, the net is an economic loss and the burden is carried by the United States.

Since the general world-wide abandonment of the gold standard and the exercise of governmental exchange controls, wide fluctuations in relative prices as between countries have disrupted normal trade channels, permitted of dumping operations, and resulted in chaos in trade relations. Therefore, no trade agreement which fails to consider stability of exchange can be a satisfactory basis for trade. Trade agreements without exchange stability are a danger to any country intending to maintain a stable currency, and corollary to this fact is the conclusion that trade agreements carrying the "unconditional most favored nation" clause are an absurdity in a world at war through currency manipulation for purposes of trade advantage.

Any country intending to maintain a stable currency amidst such world currency confusion is rash indeed when it makes and binds itself to set tariffs.

The world is at war both in physical combat and through a multiplicity of types of economic offense and defense. The United States, if it is to remain at peace and remain a democracy must be prepared to defend its trade through elasticity in meeting these situations. For that purpose, we must have certain automatic protection against currency manipulation by foreign bodies. Our trade agreements binding ourselves to "set" tariffs and the "free" status are a positive menace to our home industry and employment without a mechanism designed to compensate for wide exchange fluctuations.

We can and do accept services in the form of shipping, but in so doing we make ourselves dependent upon foreign flags.

Import duties or tariffs are charged upon certain classes of foreign goods entering the United States. The purpose of these duties or tariffs is twofold, and both are important. One purpose is to raise revenue and the other is to equalize the foreign producers' cost to the American cost in the American market.

The first purpose, to raise revenue, is best served by taxing foreign goods imported that are principally luxury items and that are not necessarily in competition with domestic production. This tariff can well be whatever the traffic will bear.

The second purpose, to equalize production costs, serves to protect American labor and agriculture from direct competition in home markets by the products of low-wage, low-standard-of-living countries. This protection is especially important in time of depression and unemployment because our ceiling for wages in domestic industry which is in competition here at home with foreign industry is governed by this equalizing tax or tariff. To lower such equalizing taxes in time of unemployment serves to aggravate unemployment and depress prices.

It is apparent, therefore, that our ability to dispose satisfactorily of our surplus products abroad is limited by the volume of foreign goods that we need and can use in exchange. The volume of foreign goods that we need and can use depends very largely on domestic conditions. When we are in a state of prosperity we consume more rubber and tin and coffee, but when we are in depression we consume less of these things as they are to some degree luxury items. Therefore, to increase our foreign trade we must increase the domestic consumption of foreign goods, but avoid creating conditions where such foreign goods compete with our own producers and thereby aggravate unemployment.

Concerning our "normal" export crop—cotton—as that is a labor crop, in direct competition with the peon, coolie and slave labor of South America, China, Africa, and Asia Minor, the salvation of present cotton growers lies not in insistence upon continuing that debilitating competition, but in working toward a domestic production for domestic consumption and fair domestic price, and a utilization of the land presently cultivated for export cotton in cultivation of crops for local consumption, and for domestic consumption through chemurgic processing. An improved standard of living will create new demands and new local industry to absorb the displaced land and labor.

CONCLUSIONS

(1) The producing and shipping of American products into foreign commerce is a real source of employment, providing foreign products taken in exchange do not displace American-made products in American markets.

(2) The ability of the American market to absorb needed non-competitive foreign products depends largely upon the state of American prosperity.

(3) The forcing of American goods into foreign markets by the granting of medium and long-term credits, without the backing of

American-held collateral security, is hazardous and our experience in this is bad. It should be avoided.

(4) The acceptance of gold and silver in payment of trade balances constitutes a free grant to the extent that such metals are over-valued, and is a drain upon our domestic resources.

(5) The binding of tariffs and free lists at a time of instability in foreign exchange is dangerous to our economy, as it opens the way to our becoming the victims of dumping operations and consequent unemployment.

(6) As a condition precedent to the consummation of trade agreements, currency stability should be guaranteed, and compensating tax mechanics introduced to protect the "unconditional most favored nation" clause against exchange manipulation by nonagreement countries.

(7) Tariffs heretofore established under trade agreements should be immediately reviewed in the light of the effect of exchange reductions made by agreement countries subsequent to the signing of agreements, as these exchange reductions tend to nullify tariffs and expose our competitive industry to low prices, thus aggravating unemployment.

(8) While we may obtain an employment stimulus in certain lines furnishing war supplies to belligerents, unemployment is being created through foreign curtailment of purchases of products ordinarily items of export. We should insist on a better balance in belligerent purchases and prepare to absorb the unemployment that will result when war material purchases cease.

(9) Generally, as domestic prosperity increases, greater demand is created for coffee, tea, rubber, silk, etc. As these are largely luxury items, the demand for them accelerates rapidly with the advent of prosperity. Domestic prosperity is, therefore, the key to increasing employment through exports to pay for these imports.

(Signed) CARL HINSHAW.
KARL E. MUNDT.

REPORT OF PART OF THE COMMITTEE ON FOREIGN TRADE AND UNEMPLOYMENT

Mr. CHAIRMAN: Permit me to preface my report with a few words of congratulation for the foresight displayed by the members of the congressional committee for its courage in undertaking such an important task as that of a study and possible solution of the unemployment problem in the United States and for the energy and vigor with which the various subcommittees have attacked the problem.

I have been assigned the task of presenting to the committee a study of the relation of our foreign trade to the problem of unemployment and I have examined this intricate relationship from every angle that suggested itself to me.

Those who study the subject with an open mind are bound to realize that our foreign trade gives employment to thousands and even hundreds of thousands of our people. I am convinced that if this trade is developed by sound economic policies, such development will greatly expand employment and thus contribute materially to the reduction of our unemployment rolls.

I realize that many otherwise well-informed people look upon foreign trade as a very minor factor in employment. It is commonly stated in an offhand way, that since our foreign trade is only about 10 percent of our total trade, it is of little importance one way or another and hence can have no vital bearing on the problem of unemployment.

Let us consider for a moment what this 10 percent of our entire trade means in terms of jobs. Normally there should be 50,000,000 employed men and women in the United States. Since it is conceded that foreign trade constitutes one-tenth of our entire trade, it is apparent that this means employment for one-tenth of 50,000,000 people, or the very important item of 5,000,000 jobs. What intelligent man or woman will sniff at that?

Furthermore, while 10 percent relates to the whole of our trade, it is a fact that many branches of industry are dependent upon foreign markets, not for a mere one-tenth of their business, but for as much as 40 or 50 or 60 percent of their business.

Take cotton, for instance. For many years over two-thirds of our raw cotton was regularly exported. Dr. James A. B. Scherer some years ago wrote a notable book showing that cotton had throughout the years paid what would otherwise have been an enormous adverse balance of trade. This book, *Cotton as a World Power*, is worth any man's reading, despite the fact that conditions have so greatly changed since its publication. Basically, it is a sound book and one that makes clear many problems not sufficiently well understood.

In order to show what conditions prevail at present in regard to the value of our exports, I have dug out the figures in regard to the value of our exports in certain commodities and have figured out the percentage this bears to our total production of each of these.

It proved rather difficult to get all the data I needed, but I have made what I can guarantee are pretty correct estimates in the few cases where exact figures were not available.

Here is the table:

Commodity	Percent of production exported			Value of exports		
	1929	1933	1937	1929	1933	1937
Raw cotton	54.8	64.9	46.5	\$770,830,000	\$366,212,000	\$368,660,000
Leaf tobacco	41.2	34.3	45.3	145,763,000	82,094,000	134,520,000
Wheat	22.5	4.5	7.3	192,292,000	18,592,000	53,977,000
Automobiles	12.0	10.9	10.0	541,296,000	90,630,000	346,887,000
Radio apparatus	5.6	14.4	12.0	23,122,000	16,126,000	25,454,000
Sewing machines	29.8	35.0	31.6	12,182,000	3,356,000	11,053,000
Office appliances	30.2	27.0	23.0	54,754,000	15,768,000	15,582,000
Borax	47.0	46.0	42.9	8,271,000	5,582,000	37,988,000
Mining and pumping machinery	18.5	15.2	23.0	54,449,000	13,504,000	59,989,000

¹ For 1935.

I am not going to read the entire table, but running through it I find that in 1929 54.8 percent of our raw cotton was exported, as against 46.5 percent for 1937. The value of our cotton exports in 1929 was \$770,830,000 and in 1937, \$368,660,000. Did these enormous sales in 1929 mean anything to the men and women engaged in producing cotton? Did these exports give work to only an insignificant number of people, or did they mean the difference between penury and comfort for hundreds of thousands of people? Of course the first statement is false and the second is true. That is why no amount of propaganda can influence the cotton States against the reciprocal-trade agreements. They know what the export trade means to them in the way of markets, jobs, better prices, and better returns on each year's work.

The second item on the table is leaf tobacco.

Tobacco farmers and all employed in the tobacco trade watch with intense interest the rise or fall of the exports of tobacco. All know that when exports are high there will be more activity all along the line, with greater employment at better pay.

In 1929 our exports of leaf tobacco took care of 41.2 percent of our production. This fell in 1933 to 34.3 percent and rose in 1937 to 45.3. No one need point out which year brought better returns, with fuller employment in the tobacco country.

Wheat exports have varied greatly from year to year. As the table shows, in 1929 the percentage of our production exported was 22.5 or nearly a quarter of the crop. This fell to 4.5 percent in 1933 and rose to only 7.3 percent in 1937. No one here needs to be told how largely our wheat farmers and all the thousands of men and women who get their living from wheat farming depend upon the foreign market. We either must increase our exports, and do what is possible to stabilize them from year to year, or we must convert thousands of acres of first-class wheat land to some other use. That this involves great and difficult changes in the lives and fortunes of tens of thousands of families is apparent to all. The solution for this large part of our population is to promote exports of wheat and keep on promoting them. Thus only can the farmer and his family and his hired men hope to have any security in their jobs and in their purchasing power.

Turning to some of our great manufacturing industries that depend to a high degree on the export market, we find that from 10 to 12 percent of the automobiles produced in this country each year finds a market abroad. When our production fell in 1931-32-33, armies of men were thrown out of work, with repercussions that affected

every part of this country. The part that the falling off of exports of automobiles played in this is indicated by the fall of the value of the exports from over half a billion dollars in 1929 to \$90,000,000 in 1933. How many men did this slump in exports throw out of work and put in the bread line? It is difficult to say definitely but there were enough to threaten our entire employment structure.

The United States long ago took the international lead in the manufacture of sewing machines. In quality, appearance, price, and general superiority, they ranked first. By consistent effort the manufacturers built up an enormous export sale of these machines, so that even in 1933 over a third of the sewing machines made in the United States was exported. This rose to nearly a half in 1937. The value exceeded \$37,000,000 that year. That this gave employment to an army of workers in the factories is apparent. Not so readily recognized is the fact that this export trade also gave jobs to many railroad and other transportation workers and to a great organization of American salesmen, sales managers, and office workers both here and abroad.

An interesting item that I selected from many others is that of borax, which regularly exports very nearly half of each year's production. A lot of men and a lot of mules found work in mining and transporting borax. Without the export market, they would have been in the surplus category.

One might go on indefinitely with the different products. For instance, the great dependence of our corn and hog farmers on the foreign market might be stressed. Or the value of exports to our fresh and dried fruit industries and to all the various canning factories might be noted. But I hope enough has been considered to bring out the basic fact that foreign trade means jobs, purchasing power, stability, and prosperity to men and women in almost countless industries.

Now, as to precisely how many people depend upon foreign trade for their livelihood, authorities differ. As I said in the beginning, it is commonly stated that our export trade in general constitutes one-tenth of our total. This should indicate 5,000,000 jobs when industry is active and times fairly good.

Looking at the latest summary made by the Bureau of Foreign and Domestic Commerce, dated January 19, 1939, we find a set of conservative figures. These estimate that the number of persons engaged in production and distribution for export was in 1929 about 3,198,000; for 1933 about 2,384,000; and for 1937 about 2,400,000. The percent of total employment in agriculture, manufacturing, mining, and transportation in 1929 was 12.4; in 1935 it was 8.9 percent and in 1937, 9.6 percent.

Estimate of number of persons engaged in the production and distribution of goods for export in 1929, 1933, 1935, and 1937

	1929	1933	1935	1937
Estimated number of persons engaged in production and distribution for export	3,198,000	2,384,000	2,088,000	2,400,000
Percent of total employment in agriculture, manufactures, mining, and transportation in the United States	12.4	11.1	8.9	9.6
Percent of total employment in all industries in the United States	6.6	6.0	4.7	5.1
Manufacture, total	946,000	874,000	468,000	573,000
Mining, total	162,000	49,000	57,000	76,000
Fishing	10,000	4,000	28,000	38,000
Agriculture	1,968,000	1,907,000	1,593,000	1,432,000
Distribution	267,000	139,000	154,000	204,000
Banking and marine insurance	15,000	11,000	12,000	13,000

These estimates, while doubtless as carefully made as possible, necessarily fail to include much employment indirectly due to foreign trade. For example, the total effect on our 55,000,000 farm population, living on over 7,000,000 farms, of a drastic drop in farm exports is not confined to them. The income of this population depends upon marketing their crops readily at fair prices. With as much as half the crop frequently depending upon the export market, the falling away of that market is ruinous. For it piles up surpluses, brings prices tumbling down, cuts the precious cash income to pieces and destroys the farmers' purchasing power. At once the market for the products of industry falls. Farm machinery, automobiles, sewing machines, shoes, clothing, millinery, furniture, and all the other commodities the farmer ordinarily buys remain in the stock-room. Factories cut production and lay off employees. The railroads go into bankruptcy. In every industry the pinch is felt, with retrenchment and discharge of employees repeating itself in ever-widening circles. That is why it is impossible to state definitely the effect of our export trade on employment. All that we can assert with complete assurance is that it is much greater than even the 5,000,000 estimate given at the beginning of this report.

Let us consider now the question of imports.

The old mercantile theory that declared an excess of exports over imports created a "favorable" balance of trade, still prevails to a surprising extent. In fact, the feeling against imports is rather general. This is due to the theory that a dollar's worth of imports necessarily displaces a dollar's worth of goods that might otherwise be produced in this country by our own labor. The fact that one-third of our imports in 1937 was made up of crude materials for use in manufacturing and nearly one-seventh was crude foodstuffs that were processed here, is an answer to the displacement theory. These imports certainly gave jobs to our workers. Since they either supplemented an insufficient domestic production or were entirely noncompetitive, the truth is apparent.

Even the most rigid mercantilist admits that certain imports are essential to our industry and our well being. Hence, little objection is made to bringing in such imports as crude rubber; tin in the form of bars, blocks, and pigs to keep our tin mills going; chemicals needed in industry; certain grades of wool and fibers required by our manufacturers; coffee, tea, and cocoa and certain tropical imports not produced here. As a matter of fact, many other imports are essential to our industry and to full employment in our factories.

There is also a class of partly competitive imports that supplement our domestic production and are considered essential.

It is undisputable that imports directly or indirectly give employment to great numbers of our people. All sorts of rubber manufactures, food-processing industries, chemical works, and many other industries depend upon imports for their very existence. Hence, their employees owe their jobs to imports.

Manufactured imports also open employment to our people. Take such luxury articles as beaded or hand-embroidered bags, hand-wrought laces, carved or painted fans, perfumery, and dozens of other imports that appeal to those who indulge in such things. These imports maintain great importing houses, with their staff of experts, clerks, salesmen, packers, correspondents. Sent by truck, train, boat,

or air to stores in all parts of the country they help employment in all the transportation industries. In the small shops and large mercantile establishments they open jobs for salesmen and women. It is doubtless true that they do in some cases displace domestic products, but not to the extent that is generally thought.

In the end, of course, the whole question of imports rests upon the necessity of our taking imports to pay for our exports, and thus keeping our people employed in export industries. The only alternative is to take services, such as shipping and insurance, to build up great export balances and invest them in foreign securities, as we did to our sorrow in the era of Harding and Coolidge and Hoover, or to take imports for our exports. The truth is that trade is and must be an exchange of goods for goods or services or something of value. To speed up exports and dam up imports is to court disaster and create unemployment. Right now we are all concerned over the enormous amount of gold we are accumulating. This gold influx is due, first, to our too "favorable" balance of trade, which is partly settled by establishing credits here derived from gold imports. Second, our unwieldy gold stock is partly due to foreign investors snapping up the credits established by gold shipments and purchasing stocks and bonds and buildings and other investments here. Why? Because this is the safest country in the world for investments as well as for people. We can check or stop the imports of gold by developing the reciprocal trade treaties in a way that imports and services will balance exports and services. That way means full employment for our people.

Incidentally, the influx of gold is not due to the price paid here for gold. That price is uniform in the United States and Great Britain.

In closing I wish to call your attention to this extract from a statement recently made by the State Department:

Restoration of foreign trade is essential to the ability of industry to employ labor at high wage levels.

Exports, although never making up much more than 10 percent of the total national production of movable goods, are important enough to make the difference between operating at a profit and operating at a loss in a great number of industries. Reopening of profitable foreign markets means the opening of plants shut down during the depression, with consequent reemployment not only of men to produce exports but of men to produce for home sales. Elsewhere, where export-trade losses have necessitated the spreading of work, wage increases or added working time result from increased foreign trade. These gains gradually spread through the entire economy. New employment resulting from increased exports is created not only for those workers employed in making radios for Brasil, or office machines for the United Kingdom, but for all workers in manufacturing, distribution, or service industries. Increased pay rolls in manufacturing mean increased travel by motor, rail, and water, increased consumption of meat and dairy products, and so forth.

Evidence of the close relationship between foreign trade and domestic prosperity is found in the fact that increased factory employment has always accompanied increased foreign trade, while employment falls with decreases in foreign trade. This parallel not only refutes the theory that increased imports hurt domestic labor but further points to the fact that domestic activity depends to a certain extent on the level of foreign trade.

THOMAS F. FORD,
THOMAS D'ALESSANDRO, Jr.

which is to be done by the people of America. The solution of the unemployment problem must be based upon the principle that the production of goods and services must be directed to the needs of the people. The solution of the unemployment problem must be based upon the principle that the production of goods and services must be directed to the needs of the people.

REPORT OF THE COMMITTEE ON THE MONETARY AND FINANCIAL SYSTEM AND UNEMPLOYMENT

The basic solution of the unemployment problem must undoubtedly be found in the development of a system of distribution and exchange which will enable the people of America to consume as they are able to produce. Only mass consumption on a high standard of living level can possibly support mass production.

Everyone will agree that the basic cause of unemployment is a lack of balance between our power to produce and the demand for goods on the part of consumers who have money to spend. We have millions of people who are in need of even common necessities, we have an abundance of natural resources and a great industrial plant which is operating at no more than 50 percent of capacity. The problem of unemployment is largely if not primarily one of getting into the hands of the needy people the purchasing power which will enable them to demand the goods which the idle machinery and idle men could and should be producing.

All exchange of goods and services between producer and consumer is accomplished in modern society by means of the device called money. In the earliest days money consisted of things which had intrinsic value. Since little division of labor existed in those days and many people produced the very commodities which they themselves used, the preference of people for the possession of money over the possession of other commodities was not so very great. A lot of people could easily get along without money. Under these circumstances it was hardly possible for the monetary tail to wag the economic-system dog. Today the nature of money has almost completely changed and its relation to other commodities is a very different one. We live in a world dominated by machinery where not a single person in society produces the goods that he and his family need to consume. No one can get along without the use of money. Yet we still permit money to be regarded and handled almost exactly like commodities. We do this in spite of the fact that money is the one thing which everyone in society desires above all others. Its central importance to our economic system is so great that we take it for granted and then proceed to surround the whole money question with an aura of mystery and taboo.

The buying power of our money today is no longer determined by the intrinsic value of the material out of which money is made. It is determined solely by the ratio existing at any given time between the volume of money in circulation and its velocity on the one hand, and the flow of goods and services through the markets of the Nation on the other. This ratio ought always to be a constant one. The buying power of the dollar should remain constant and dependable from year to year and decade to decade. But it does not do so. The reason is found in the peculiar sort of "money" we presently use plus the utterly unsound and unscientific method whereby money is originally created and placed into circulation.

Now, what is the nature of this money that we use today? Nearly all of it consists of bank credit or checkbook money. Ninety-seven percent of America's business is transacted with this type of money.

The manner in which this money comes into existence was described by Chairman Eccles of the Federal Reserve Board in testifying before the Banking and Currency Committee of the House in 1935 as follows:

In purchasing offerings of Government bonds, the banking system as a whole creates new money, or bank deposits. When the banks buy a billion dollars of Government bonds as they are offered—and you have to consider the banking system as a whole, as a unit—the banks credit the deposit account of the Treasury with a billion dollars. They debit their Government bond account a billion dollars, or they actually create, by a bookkeeping entry, a billion dollars.

In like manner, bank credit money is created by the banking system when a bank loans against (or monetizes) a farmer's mortgage or a businessman's commercial paper. It is easy to see that inevitably, in actual practice, the volume of these commercial loans can never be adjusted to supply us with the volume of means of payment we need for our expanding economy. On the contrary, commercial loans, hence demand deposits, hence America's money supply, have been expanded vigorously at the very times when the country did not need more money in circulation, and contracted still more sharply at times when more money was desperately needed to overcome deflation, bankruptcy, and depression. The "system" has and must by its very nature continue to work exactly opposite to the public interest of the United States. Professor Slichter of Harvard School of Business Administration, one of America's outstanding economists, has this to say in his book *Toward Stability* (p. 22):

Credit greatly accentuates the fluctuations in business which are produced by other causes and, in addition, it is itself an independent cause of maladjustment. * * * Indeed, if we were living in a cash economy and desired for some strange reason to make an economy highly susceptible to violent fluctuations, we could scarcely do better than to invent the present credit system.

* * * Under a credit system such as ours * * * by going into debt at the banks we expand the currency and by paying bank loans we contract it. This is a result of the fact that bank loans are made, not by transferring money from one person to another, but by creating credit dollars, and that these loans are paid by destroying credit dollars.

Therefore, it is literally true today that although the Constitution says "Congress shall coin money and regulate the value thereof," as a matter of fact Congress not only does not perform this function but pays interest to the banks in order to induce them to exercise this function of sovereignty.

Hence only by the contraction of debt is it possible for the Nation or its people to expand the money in circulation no matter how much the production power of the Nation may have grown and no matter how great the flow of goods and services may be.

Furthermore, we find that the only periods of general prosperity in the history of this or any other capitalistic nations have been times when for some reason and from some source a substantial net addition to the volume of money (bank credit) in circulation was being poured into the system. For years this was done by means of monetizing the rising values of western lands; it has been done during every war by means of heavy Government borrowing; it was done during the twenties by means of a contraction of \$10,000,000,000 of debt by consumers through purchases made on the installment plan as well as by the lending of vast sums to foreign countries. The general

truth is, therefore, that only when large additions to buying power were being injected into the system has there been prosperity.

This has been true because population has grown, new machines have been developed, power to produce has grown—hence buying power had to increase correspondingly or depression would inevitably result.

As we check the source of purchasing power in the past, we find that extension of credit and use of savings have supplied the deficiency existing between production and consumption. In other words, the creation of debt or the extension of credit, which are two ways of saying the same thing, has underwritten our economy for the various periods of successive business cycles. Thus, the debtors or spenders although looked at askance by the creditors or the thrifty, have actually made possible such spasmodic employment of our human and natural resources as we have enjoyed during our comparatively brief history as a nation.

During the periods prior to the New Deal, this debt creation has been accomplished through personal and institutional underwriting of private enterprise. During the New Deal regime, the debt or credit expansion has been accomplished for the most part through the public underwriting of governmental activity. In both cases, however, we have always eventually arrived at the same point, that is, where further debt creation or credit extension could not or would not be borne or tolerated.

We were at that point in 1929 and we are once again at that same point today; the only difference being that in 1929 private debt had been expanded through private credit inflation to a total which the national income could not support without serious impairment of current purchasing power; while today we find public debt has been expanded through public credit expansion to a total which political psychology will not further tolerate. Therefore, in order to stabilize our national economy and go forward through private enterprise we must find a new monetary vehicle to ride to replace the debt-money system which is the model T distribution method of a streamline production age.

During the past three-quarters of a century, credit or debt has played its part as a basis for our money supply—those dollars which are the connecting link between production and consumption. Consequently, we must now substitute for the debt spark plug of economic activity a dynamic method of underwriting or financing consumption whereby employment of our human and natural resources to reasonable capacity may be achieved. This must be done without exposing our economy to the threat of a runaway inflation (either currency or credit).

A workable monetary system would be one in which the quantity of actively circulating money expands as production expands. This we cannot have under our present system unless we pay the price of overcoming debt—either private or public. If the people generally stop borrowing and if the Government comes to the end of its rope so far as expansion of its debt is concerned then disaster must follow under the present system.

The simple principle of monetary policy which is all important is this: Whenever the Nation as a whole is in need of a change in the volume of money in active circulation in order to facilitate its busi-

ness and employ its productive resources to the full, it then becomes the primary duty of Government, without the construction of debt, to effect that change and to create and pay into circulation such amounts of money or such credits as are needed. Conversely, if prices are sharply rising at a time when our productive machine is in full operation and our people fully employed it is the duty of Government to check this inflationary trend by means of measures of taxation and monetary measures that will reduce the volume of actively circulating money.

We believe one of the principal, if not the principal, cause of unemployment is to be found in the inflation and deflation of checkbook or bank-credit money. Even as this money can be created by the stroke of a pen when loans are made, so it can be destroyed by any one of 15,000 separate banks by the shake of a head indicating refusal to renew a loan or make a new one to replace one that has been repaid.

America cannot rely on this sort of hit and miss (mostly miss) monetary system if she is to overcome unemployment.

The principles upon which a sound monetary system should be built are the following:

(1) The volume of money (cash and demand deposits) in active circulation should reflect the facts of industry, rather than having the reverse be true; that is to say, the volume of money should expand as production of real goods and services expands and no faster and no more slowly.

(2) This vitally necessary expansion should not be based on debt.

(3) Both inflation and deflation must be prevented and a buying power for the dollar established and maintained which will give confidence to businessmen and a constant value to real goods and property throughout the Nation. This requires both sound monetary and sound tax measures.

(4) Only the Congress of the United States and no other agency, public or private, should exercise the essential right of sovereignty to create money or any credit substitute therefor.

(5) "Money in the bank" should be "money in the bank," not a mere promise on the part of the bank to pay a depositor when, as, and if it can. Therefore, 100 percent cash reserves behind demand deposits should be established in all banks as quickly as this can be done without inconvenience or deflationary consequences. Once this is done there could never again be a bank failure.

(6) The Government of the United States should never pay interest on its own credit.

(7) The dollar should not be tied to a metallic standard nor should it under any circumstances be redeemable in gold, silver, or anything except useful goods and services in the markets of the Nation. The relationship of the dollar to gold or silver is of no consequence at all to the people of the Nation. Its relationship to the flow of goods and services is all important, and that relationship should be scientifically maintained at all times.

We, therefore, propose that the following concrete steps be taken by the Congress:

(1) Acquisition of the capital stock of the 12 central Federal Reserve banks by the Government by purchase of said stock from the member banks which now own it.

(2) The creation of a monetary authority to replace the present Federal Reserve Board and to exercise all monetary powers now

lodged in the Federal Reserve Board, the President, Secretary of the Treasury, or any other official.

(3) Passage by Congress of an explicit legislative mandate conferring on the monetary authority the sole and exclusive right to issue the money of the United States and setting forth how, when, and to what extent this power shall be exercised.

(4) The setting up of a joint committee of the House and Senate to be known as the joint committee on monetary policy and the requirement by law that weekly reports be made to this committee by the chairman of the monetary authority in person.

(5) Provision for the selection of the monetary authority in the following way: (a) Nomination of a panel of candidates by House resolution; (b) appointment by the President of the requisite number of members from this panel; (c) confirmation by the Senate; (d) declaration of vacancy in the office of any member of the monetary authority by resolution of the House and Senate.

(6) Repeal of all powers heretofore granted directly or indirectly to national banks, Federal Reserve banks, the Secretary of the Treasury, the President, or any other person or agency to create money or any substitute therefor.

(7) Creation of the money of the United States by the monetary authority as the agent of Congress in accordance with national needs; that is, the creation each year of a percentage increase in the volume of money previously in circulation equal to the percentage increase in the Nation's productive capacity. Money so created should be paid into circulation by the Government in accordance with congressional appropriations for such purposes as ordinary expenses, old-age pensions, or wages on public works.

(8) Inclusion in the legislative mandate given to the monetary authority that it establish and thereafter maintain a fair, parity price level for basic farm commodities. (Provision should be made for the possibility of a slowly rising price level since this will encourage investment in constructive enterprise and discourage hoarding by gradually reducing the buying power of money held out of use.)

(9) Establishment of 100-percent cash reserves for all demand deposits in banks, thus taking from the banks their present power to create and destroy credit or checkbook money; and the setting up of a fair schedule of service charges as a more just and reasonable source of bank income. (The necessary cash required to give the banks enough for dollar-for-dollar reserves can be brought into being by having the monetary authority buy up Government bonds, and outstanding notes and guaranteed obligations, thus gradually eliminating the public debt at the same time that 100-percent reserves are being established.)

(10) Development of a tax program which will prevent the holding out of use of large accumulations of stagnant funds and which can be effective as a means of checking an inflationary tendency if such should arise.

(11) All the various types of currency now outstanding should be replaced by one kind—United States currency, issued by the monetary authority.

(12) With a monetary system, such as the above 11 points, Government lending operations could probably be sharply reduced if not completely discontinued. It is an important element of sound monetary policy today, however, that the rate of interest be kept low.

All self-liquidating public works be financed without interest charges and on the basis of an advancement of the principal out of a national credit and its repayment over a period of time out of revenues, thus retiring the credit set up for this purpose. And, if Government lending operations are carried on in order, for example, to provide low-interest credit to farmers there should be no bond sales by any Government agency making such loans except only to the monetary authority which would buy the bonds with national credit set up for the purpose and liquidated as the loans were repaid.

(13) Further, with such a monetary system in effect the only use or importance of gold or silver would be to settle international balances. Under no circumstances should the money of the Nation be made redeemable in metals or tied to it in any way.

The foregoing is, we realize, in the nature of a basic reform and may be regarded as a long-range program. We believe, however, that the time has come for some long-range thinking; and further that our choice is between monetary reform and a relentless drive toward war. For war will adjust the balance between production and consumption by destroying a large percentage of the production. Our proposal will adjust it by increasing the monetary demand of our people for peacetime goods and services.

IMMEDIATE STEPS

We see no reason why the following steps at least should not be taken at once:

(1) Acquisition of the central Federal Reserve banks by Congress.

(2) Expansion of the Nation's credit without increase in the public debt until such time as full employment has been achieved and a price level established which will give reasonable opportunity for producers to obtain cost-of-production prices for basic commodities. (It is to be noted that if the Federal Reserve banks were owned by the Government, their power to create and expand credit, exercised exactly as it is now, would be available to accomplish this. For example, revenue-producing public works of Federal or local governments could readily be financed without any increase in public debt and without any interest charges except those paid by the people to their own government, that is, to themselves. In like manner credit could be made available to the Farm Credit Administration and similar lending agencies.)

(3) Calling in of all outstanding gold certificates and gold-certificate credits and their replacement with United States currency.

(4) Amendment of the Banking Act of 1935 to give the Federal Reserve Board power to gradually increase reserve requirements up to 100 percent as additional cash reserves appear in the banks as a result of the measures outlined in (2) and (3) above.

(5) Taxation of hoarded funds.

It must be reemphasized that these four steps will not in themselves establish a scientific or effective monetary system. They are only steps which are designated to meet, with a minimum of change in our present familiar practices, the most outstanding needs of the present desperate situation.

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REPORT OF THE COMMITTEE ON MONOPOLY AND UNEMPLOYMENT

As members of the subcommittee on monopoly and unemployment, we view with alarm the growing concentration of national wealth in the hands of a few large corporations which now have direct control of the market. We find that in 1937, 200 of the largest corporations manufactured one-half of the Nation's goods, had one-fifth of the national wealth, two-fifths of the financial assets, one-half of the industrial and three-fifths of the corporate wealth of America. One of the most serious conditions of concentrated wealth is found in the control of natural resources, where, for instance, five corporations each have a monopoly in one of these five basic minerals: aluminum, diatomite, magnesite, magnesium, and molybdenum. Though in most industries in America complete monopolies do not exist, the effect of a few large, controlling corporations in an industry is virtually the same as complete monopoly itself.

We find that the existence of monopolies and monopolistic practices (i. e., rebates, price agreements, and price leadership) tends in most instances to decrease the opportunities of employment. As revealed in the testimony given at the hearings of the Temporary National Economic Committee, the shift from market prices (those obtained in relatively free competition) to administrative prices (those dictated by the most powerful corporations in many fields) has gone so far that a major part of American business activity is now carried on by a few of the leading corporations in the major industries. The small concerns are forced either to follow the leaders in their price policies or to go out of business. At present the number of major competing companies in the most major industries has been reduced to a point that, in event of a drop in demand, the leading corporations in an industry are often able to slacken production and keep up prices at a point where maximum profits can be gained. If the market were a competitive one, companies would be forced to drop their prices when there was a drop in demand. Having control of the market, however, the large corporations benefit more by a drop in production than a drop in price, temporarily at least. The result of such a policy is to throw men out of work and eventually to decrease purchasing power. This condition of administered prices and the resulting instability in employment opportunities is especially prevalent in the manufacturing of durable goods, such as cement, steel, and glass.

Though we find that the vast financial resources of monopolies and semimonopolies have often made possible the development of technological changes, we have discovered that the introduction of such changes has not raised the general purchasing power proportionally to the gains of business. As a result the demand for goods has not been increased proportionally to the decreased unit cost of production, and thus employment opportunities have not increased. This trend, which rarely harms monopolies or large corporations because of their

control over the market, has been caused partially by the lack of the necessary legislation and antitrust enforcement to prevent patent pools and similar devices which tend to direct the profits of technological improvements into the hands of a few powerful corporations.

We have reviewed the efforts of the Federal Government to regulate and to prevent monopolies with such agencies as the Interstate Commerce Commission, the Federal Trade Commission, and the Antitrust Division of the Department of Justice, and we have found that these efforts have met with only partial success. Though we discovered that most of the antitrust legislation has proven adequate, we found that the appropriations of the Federal Trade Commission and the Antitrust Division have been too low for these agencies to enforce their enabling statutes adequately. The Antitrust Division, for example, is responsible for matters arising under 33 major statutes such as the Sherman Antitrust Act, the Clayton Act, the Public Utility Holding Company Act, and the Agricultural Adjustment Act. Today, with 32 major antitrust cases pending in court, a bare minimum of \$1,600,000, according to Thurman Arnold, is needed to prosecute these cases, without adding any new ones during the course of the next fiscal year. The appropriation to this Division recently passed by the Senate, after passing the House, amounted to \$1,400,000. A similar lack of funds has prevented the Federal Trade Commission from performing its functions adequately; it is almost impossible for this \$600,000 Government agency to check up on the business practices of many billion-dollar corporations.

Though we have found that a condition of free competition in most industries is most conducive to increased employment, we have discovered that Government-regulated monopolies, in some cases, may be beneficial to the general public.

RECOMMENDATIONS

Like Justice Brandeis, we fear "the curse of bigness." We fear that the increasing concentration of the Nation's wealth may cause financial institutions to become stronger than the Government itself; for by gradually destroying economic democracy these combinations may eventually destroy political democracy itself.

We commend the work that is being done by the Temporary National Economic Committee as one of the best attempts to discover the facts about the increasing concentration of financial power. We therefore urge every member of the Unemployment Conference to read the brief preliminary report of this committee (S. Doc. 93, 76th Cong., 1st sess.) with special attention to the recommendations for needed legislation found on pages 15 to 20. The findings and recommendations of this committee embodied in the preliminary report and the final report which will be published next winter, may prove to be a basis on which future congressional bills will be drafted.

We endorse the actions of the Antitrust Division, which is now in the process of bringing suits against corporations in the following industries: Radio, electrical equipment, glass, gasoline, and building materials. If successful, these suits will put an end to certain monopolistic practices which have tended to decrease employment opportunities.

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Similarly we commend the work that is being done by the Federal Trade Commission. Realizing, however, that the work of both the Commission and the Anti-Trust Division has been greatly crippled by the lack of sufficient funds, we recommend that future appropriations to the two agencies be raised in order that they may perform their functions more effectively. It is virtually impossible for a million-dollar Government agency to prosecute several billion-dollar corporations, each with its own particular methods of restraining trade.

Our information and study have been insufficient for us to make specific recommendations for changes in the patent laws. Nevertheless, we recommend legislation which would tend to put an end to patent pools and similar schemes which cause the benefits of technological changes to be directed into the hands of a few controlling corporations. Some good suggestions for needed legislation will be found in the preliminary report of the Temporary National Economic Committee.

Though all the members of our committee agree that one of the chief means of creating more employment opportunities is to make every effort to break up monopolies and semimonopolies, we are divided in our opinions about the advisability of Government ownership and the control of an industry in which monopolies cannot be broken up. All members endorse the regulatory work performed by such agencies as the Federal Power Commission, Federal Communications Commission, Interstate Commerce Commission, etc., but some members are skeptical about the extension of governmental control over industries, as a method of putting an end to unemployment. They believe that monopolies, semimonopolies, and the large corporations that dominate certain industries may be regulated in their practices by the Government, but never should be taken over by the Government or controlled in their policies concerning wages, prices, and production quotas. These members feel that private enterprise has long proved to be the most advantageous to the public, and they believe that Government ownership and the extreme control of industry may lead to a national state patterned after some of the totalitarian powers of Europe.

Other members of the committee, however, have different opinions concerning the concentration of economic power. In the light of the fact that the Supreme Court has ruled that bigness in itself is not a restraint of trade, and as a result monopolies and semimonopolies in certain industries cannot be prevented, some members are convinced that the Government should own and operate basic industries where competition has been destroyed and cannot be restored. They believe that Government regulation of monopolies has often failed and that in some industries monopolies are inevitable and are often more advantageous to the general public. They believe that the Government should take over certain natural resources which are now completely controlled by certain corporations.

In our opinion the Government should forward free competition in nearly every American industry. With this end in mind we recom-

mend that the membership of the Unemployment Conference give these bills their serious attention:

H. R. 2319 (S. 448) — Congressman Harrington, Petroleum Marketing Divorcement Act.—Makes it unlawful (\$10,000 fine) for any person, corporation, etc., or its affiliate to be engaged in the marketing of refined petroleum while also engaged in the production, refining, or transportation thereof. Directs the Attorney General to examine present relationships in the petroleum industry and to institute proceedings to compel compliance with this act. This bill is now before the House Committee on Foreign and Interstate Commerce.

H. R. 1—Mr. Patman.—Imposes on person operating 10 or more retail stores under the same general management, a graduated excise tax as follows: 1-15, 16-25, 26-50, 51-75, 76-100, 201-300, 301-400, 401-500, 500 or more stores, a tax of \$50, \$200, \$300, \$450, \$600, \$750, \$900, and \$1,000, respectively, per store. For the first fiscal year after enactment, this tax shall be one-half of the above rates, and for the second year three-fourths thereof.

When persons subject to the above tax operate stores in more than one State, their tax shall be multiplied by the number of States in which their stores are located. For the first fiscal year after enactment this tax shall be one-quarter of 1 percent of the amount so determined, and for the second year, one-half of 1 percent thereof.

The following shall be exempt from the operation of the bill: Any store operator whose gross business does not exceed \$250,000; filling stations engaged primarily in selling petroleum products and not tires and tubes; establishments maintained by common carriers for furnishing meals to passengers; branch offices maintained by newspapers for distributing newspapers; and individually owned stores whose revenues do not inure to the benefit of another individual, store owner, person, etc.

S. 2719—The O'Mahoney-Hobbs Bill, June 28, 1939 (Judiciary).—Provides for civil actions by the United States for violations of the antitrust laws. Offending companies will forfeit twice their total net income during the period of violation (if income is less than \$25,000 court may assess up to that amount) and offending officers and directors (a) will forfeit twice their compensation during such period, (b) will have their employment terminated for at least 90 days without pay, and (c) will be enjoined from engaging in a competitive business.

The Sherman Antitrust Act and Clayton Act are officially recognized by such titles.

S. 330.—Senator O'Mahoney and the late Senator Borah.—“Corporation Licensing Act of 1938” after January 1, it shall be unlawful for any corporation (including associations, syndicates, and limited partnerships) with gross assets including those of subsidiaries, in excess of \$100,000 to engage directly or indirectly in commerce without having obtained a license from the Federal Trade Commission. Before obtaining a license, a corporation must file a statement of its operations, financial structure, administrative set-up, etc.

Prohibits (1) discrimination against women as to pay, rights, etc.; (2) employment of children under 18 in hazardous occupation or at any time between 7 p. m. and 7 a. m. Permits employees the right of self-organization and collective bargaining.

The Commission may revoke licenses for violation of the act, etc., and may conduct investigations to ascertain such violations.

Such licensed corporation must have their chief place of business, executive officers, and directors meetings in the state of organization. Corporate surpluses are restricted and stock ownership in other than subsidiary corporations is forbidden.

Provides for voting by all classes of stock and for voting of proxies by representatives qualified by the Civil Service Commission in corporation and commercial law. Requires directors to be stockholders.

JOHN COFFEE, *Chairman.*
JOHN W. GWINNNE,
CHARLES H. LEAVY,
RAYMOND S. SPRINGER,
WRIGHT PATMAN.

Establishment concentration, 1937, selected large industries

Industry	Total establish- ments	Number	Establish- ments em- ploying half of workers, percent of total
Steel works and rolling-mill products	410	39	9.5
Motor vehicles, not including motorcycles	131	9	6.9
Motor-vehicle bodies and parts	936	19	2.0
Electrical machinery, apparatus and supplies, radio apparatus, and phonographs	1,597	52	3.3
Rubber tires, tubes, and other rubber goods, except boots and shoes	466	18	3.9
Ship and boat-building, steel and wooden, including repair work	544	11	2.0
Cigars and cigarettes	727	25	3.4
Meat packing, wholesale	1,160	46	4.0
Lumber and timber products, not elsewhere classified	7,647	426	5.6
Printing and publishing, newspaper and periodical	9,244	190	2.1
Printing and publishing, book, music, and job printing	10,587	447	4.2
Bread and other bakery products	17,193	663	3.9
Women's, misses', and children's apparel, not elsewhere classified	6,337	932	15.0
Clothing, men's, youths', and boys', including work clothes	3,202	274	8.6
Knit goods	1,821	156	8.7
Boots and shoes, other than rubber	1,080	174	16.0
Worsted goods	288	27	10.0
Cotton woven goods (over 12 inches in width) and cotton yarn and thread	1,072	162	15.0
Furniture, including store and office fixtures	3,097	287	9.3

2. Concentration in American industry:

Name of corporation	Total assets in 1935 [in millions]	Percentage of value of product produced
AGRICULTURAL IMPLEMENTS		
International Harvester Co.	365.2	
Allis-Chalmers Manufacturing Co.	73.2	
The Deere & Co.	70.7	
The J. I. Case Co.	39.9	
In 1935 72.4 percent of farm implements were manufactured by these 4 companies.		
AUTOMOBILES		
General Motors Corporation	1,491.9	
The Ford Motor Co.	681.6	
Chrysler Corporation	198.5	
Packard Corporation	52.7	
1930, 3 largest produced 83 percent. 1935, 4 largest produced 87.3 percent. 1937, 3 largest produced 86 percent. 1935, 4 largest produced 88.4 percent of all motor-vehicle bodies and parts.		
BISCUIT PRODUCTS		
National Biscuit Co.	124.5	
Loose-Wiles Co.	38.7	
In 1937 these 2 companies produced from 60 to 70 percent of all biscuits in America.		
BAKERY PRODUCTS		
General Baking Co.		
Continental Baking Corporation		
Ward Baking Corporation		
Purity Bakeries Corporation		
In 1935 these companies produced 20 percent of all bakeries products.		
CANS		
American Can Co.	200.1	
Continental Can Co.	94.6	
Crown Cork & Seal Co.	6.0	
McKeesport Tin Plate Co.	5.9	
In 1931 the 2 largest manufactured 90 percent. In 1934 the 4 largest manufactured 80.8 percent.		

Name of corporation	Total assets in 1935 [in millions]	Percentage of value of product produced
COMMUNICATIONS		
American Telephone & Telegraph Co.	3,998.3	
International Telephone & Telegraph Corporation	489.7	
Western Union Telegraph Co.	341.6	
In 1930, 15,682,059 of the 20,098,059 telephones or 77 percent of production was done by the American Telephone & Telegraph Co. [Bell Telephone] wire mileage = $\frac{9}{10}$ of total; operating revenue = $\frac{7}{10}$ of total; employees = $\frac{9}{10}$ of total.		
In 1931, the Western Union Telegraph Co. controlled $\frac{3}{4}$ of the telegraph service in America and also controlled 44 percent of the cable service between America and Europe. 29 1/4 percent of this service is controlled by the Mackay Co. of England.		
CORN PRODUCTS		
Corn Products Refining Co.	118.7	
DAIRY PRODUCTS		
National Dairy Products Corporation	192.0	
The Borden Co.	120.1	
ELECTRICAL EQUIPMENT		
General Electric Co.	398.1	
Westinghouse Electric & Manufacturing Co.	194.5	
In 1931, these 2 companies produced close to $\frac{3}{4}$ of the machinery and apparatus used for electrical power purposes.		(1928) 16-20.
FLOUR		
General Mills, Inc.*		
Pillsbury Flour Mills Co.*		
Commander Larabee Co.*		
Standard Milling Co.*		
In 1934, these companies controlled 29 percent of production.		
FRUIT		
United Fruit Co.	184.9	
GAS AND ELECTRICITY		
Consolidated Edison Co. of New York, Inc.	1,377.0	
Commonwealth & Southern Corporation	1,173.8	
Associated Gas & Electric Properties	1,125.4	
In 1931, former Governor Pinchot of Pennsylvania claimed that 95 percent of electric current in America was controlled by 4 major financial interests:		
Morgan and Mellon	57.12	
North American	14.03	
Harry Forbes	12.36	
Insul.	10.80	
Harry Laidler gives the following figures for the control of power in America:		
	<i>1925</i>	<i>1930</i>
	<i>Percent</i>	<i>Percent</i>
Electric Bond & Share	11.7	16.61
Insul Interest	8.6	10.86
North American	6.4	5.85
H. M. Byllesby Co.	5.3	4.80
United Gas Improvement	3.0	22.67
Mr. Laidler also estimates that 17 holding companies contain percent of gas production.		
GLASS		
Pittsburgh Plate Glass Co.	100.7	
Libby-Owens-Ford Co.*	41.7	
In 1935, these 2 companies controlled 98 percent of the production of glass.		
LEAD SMELTING		
American Smelting & Refining Co.	75.3	
The remainder of the lead smelting was done by 4 countries, each of which did less than 15 percent of production.		(1929) 55.7.
MAIL ORDERS		
Sears, Roebuck & Co.	264.0	
Montgomery Ward, Inc.	163.7	
MEAT PACKING		
Swift & Co.	321.4	
Armour Co.	317.1	
Wilson & Co.	70.2	
Cudahy Co.	76.4	
In 1929, the 2 largest performed 64 percent of production. In the same year, these 4 companies did 70 percent of the production. In 1937, the 2 largest companies did 47 percent of production.		

Name of corporation	Total assets in 1935 [in millions]	Percentage of value of product produced
MILK (CANNED)		
Borden Co.	120.1	
Nestles (Anglo-Swiss Holding Co.)	187.3	
Carnation Co.*	19.9	
Holstetia Co.*	13.3	
In 1922, these 4 companies canned 50 percent of the milk in America.		
MOVING PICTURES		
Warner Brothers Pictures, Inc.	168.5	
Loew's Inc.	128.6	
Paramount Pictures, Inc.	118.9	
PLUMBING EQUIPMENT		
American Radiator & Standard Sanitary Corporation	159.1	
Crane Co.	95.2	
PHOTOGRAPHIC EQUIPMENT		
Eastman Kodak Co.	168.3	
PUBLICATIONS		
Hearst Consolidated Publications, Inc.	128.6	
PULP AND PAPER PRODUCTS		
International Paper Co.	247.0	(1917) 27.6
Crown Zellerbach Corporation	101.3	(1917) 14.6
Brown Co.	76.4	(1917) 6.9
St. Regis Co.*	73.7	(1917) 6.9
(Total.. 55.5)		
RADIO		
Radio Corporation of America	102.5	
In 1929 the RCA had pooled 3,500 patents. The same year the company had 40 percent of its equipment manufactured by the Westinghouse Co. and 60 percent by the General Electric Co.		
RAILWAY EQUIPMENT		
Pullman, Inc.	259.6	
General American Transportation Co.	96.3	
American Car & Foundry Co.	91.2	
Baldwin Locomotive Co.*	69.7	
The Pullman Co. has a virtual monopoly in the production of sleeping cars and parlor cars.		
CASH REGISTER		
National Cash Register Co.		
In spite of 5 small competing companies, the National Cash Register Co. controls the majority of the market.		
RETAIL STORES (CHAIN)		
F. W. Woolworth Co.	192.3	
The Great Atlantic & Pacific Co. of America	180.2	
S. S. Kresge Co.	118.5	
J. C. Penney Co.	74.4	
S. H. Kress Co.	70.4	
Percentage of total sales by chain stores (1930):		
Variety stores	90.8	
Shoe stores	50.0	
Grocery stores	38.2	
Drug stores with fountain	26.8	
RETAIL STORES (DEPARTMENT)		
Marshall Field & Co.	97.0	
R. H. Macy & Co., Inc.	90.5	
Gimbels Brothers, Inc.	79.9	
RUBBER		
Goodyear Tire & Rubber Co.	192.3	
U. S. Rubber Co.	156.3	
Firestone Tire & Rubber Co.	139.3	
Goodrich Rubber Co.	124.0	
These 4 companies manufactured 83 percent of the tire output and 66 percent of the total rubber production in 1930. These 4 companies and 4 others in 1930 produced 95 percent of all the tires made in America. In 1922 these 4 companies produced 80.9 percent of the tires.		
SEWING MACHINES		
Singer Sewing Machine Co.	175.3	72.

Name of corporation	Total assets in 1935 (in millions)	Percentage of value of product produced
SOAP		
Procter & Gamble Co.	127.1	
Colgate Co.*	36.3	
STEEL AND STEEL PRODUCTS		
U. S. Steel Corporation	1,822.4	39 (1931).
Bethlehem Steel Corporation	573.5	13.6 (1931).
Republic Steel Corporation	297.5	7.5 (1931).
Youngstown Sheet & Tool Co.	207.5	5.4 (1931).
Jones-Loughlin Co.	185.0	5.3 (1931).
American Rolling Mill Co.	128.0	
Inland Steel Co.	118.0	
Wheeling Steel Co.	113.0	
Crucible Steel Co.	109.0	
Cleveland Cliffs Co.	69.5	
In 1931 the 2 leading corporations manufactured 52 percent of the total production of steel products. In 1935 the 3 leading companies manufactured 60.5 percent of the total steel production.		
SHOES		
International Shoe Corporation	88.2	
In 1931, 5 shoe-manufacturing corporations performed 25 to 30 percent of the total production.		
SUGAR		
The American Sugar Refining Co.	117.7	
National Sugar Refining Co.*		
These 2 companies refined 3/4 of the total sugarcane production in 1929.		
TOBACCO		
American Tobacco Co. (Lucky Strike)	264.2	26 (1931).
Liggett & Myers Tobacco Co. (Chesterfield)	170.5	25 (1931).
R. J. Reynolds Tobacco (Camels)	153.9	33 (1931).
Lorillard Co. (Old Gold)	55.9	8 (1931).
The same 4 companies had 89.7 percent of the production in 1935.		
CARPETS AND RUGS		
The 4 largest companies manufactured 51 percent of the total production.		

3. Concentrated control of raw materials:

Name of corporation	Total assets in 1935 (in millions)	Percentage of value of product produced
ALUMINUM		
Aluminum Co. of America	223.0	100 (1940).
This company has a 100-percent monopoly over the bauxite companies in America.		
CEMENT		
Alpha Portland Cement Co.		
Lehigh Portland Cement Co.*		
Universal Atlas Corporation		
Pennsylvania-Dixie Cement Corporation*		
These 4 corporations produced 40 percent of the cement in America.		
COAL AND COKE		
The Koppers Co.	331.0	
Glen Alden Coal Co.	151.4	
Pittsburgh Coal Co.	142.2	
Philadelphia Reading Coal & Iron Co.	93.0	
Lehigh Coal & Navigation Co.	82.0	
In 1923, 8 companies mined 78 percent of the total anthracite coal production.		
COPPER		
Anaconda Copper Mining Co.	581.5	27.3 (1920).
Kennecott Copper Corporation	323.6	13.8 (1920).
Phelps Dodge Corporation	185.1	6.0 (1920).
Calumet & Arizona Co.*		3.7 (1920).
In 1932, these corporations produced 78 percent of the total production. Recently the Phelps Dodge Corporation and the Calumet & Arizona Co. have consolidated.		

Name of corporation	Total assets in 1935 [in millions]	Percentage of value of product produced
LEAD		
American Smelting & Refining Co.	171.7	
National Lead Co.	104.0	
Bunker Hill & Sullivan Co.*		
St. Joseph Co.*		
These 4 companies controlled 50 percent of production in 1929.		
MAGNESIUM		
Dow Chemical Co.*	100.	
In 1929, the company had a total production worth \$377,000.		
MOLYBDENUM		
Climax Molybdenum Co.*	100 (1940).	
OIL		
Standard Oil Co. of New Jersey	1,804.9	
Southern Vacuum Oil Co., Inc.	780.9	
Standard Oil Co. (Indiana)	693.5	
Standard Oil Co. (California)	579.5	
Texas Corporation	473.8	
Gulf Oil Co.	430.2	
Consolidated Oil Co.	331.1	
Phillips Petroleum Co.	174.5	
Atlantic Refining Co.	163.0	
Pure Oil Co.	157.1	
Union Oil Co.	151.7	
Ohio Oil Co.	139.7	
Continental Oil Co.	91.7	
Columbus Oil & Gasoline Co.	71.8	
From 1919 to 1922 the Standard Oil Cos. refined 48 percent of the total production. In 1935 the first 4 companies on this list refined 20 percent of the total production.		
SILVER		
Anaconda Copper Mining Co.	531.5	
Silver King Coalition Co.		
Tintic Standard [Park Utah Mining Co.]*		
The Anaconda Copper Mining Co. produced 3/4 of the total silver production in 1931.		
SULFUR		
Texas Gulf Co.*	73 (1931) of world's production.	
The Freeport Texas Co. is its only competitor in America.		
IRON ORE		
4 companies control 64 percent of the total production.		
NICKEL		
International Nickel Co. (of Canada, Ltd.)	92 (1929).	
ZINC		
American Smelting & Refining Corporation	73.0	
Led by this company, 4 companies produced 43 percent of the production in 1929.		

4. From the previous list only 3 of the 200 largest nonfinancial corporations have been omitted. They are: The McKesson & Robbins, Inc., with total assets of \$71,000,000; American Woolen Co., with total assets of \$71,000,000; General Foods Co., with total assets of \$68,000,000.

5. Financial organizations:

1. Banking: According to Mr. Laidler, 1 percent of the banks in the country directly control more than 40 percent of the total national resources. Twenty-four New York, or less than one-tenth of 1 percent of the total, have combined resources of about \$10,800,000,000, while their capitalization of \$700,000,000 is almost comparable in the total to that of 20,000 country banks situated in towns of 10,000 population or less.

Mr. Craig B. Havenswood, president of the American Bankers Association, 1929, estimated that in that year "10 banks have combined resources of 10 billion; 1 percent of our banks control approximately three-fourths of the Nation's commercial wealth, leaving one-fourth to the remaining 99 percent.

2. Insurance companies: In 1931, 10 leading companies had 66 percent of the insurance policies and 20 leading companies had 80 percent of these policies (Metropolitan 17 percent, Prudential 13 percent).

REPORT OF THE COMMITTEE ON NATURAL RESOURCES AND UNEMPLOYMENT

To the Committee on Unemployment:

The Subcommittee on Natural Resources and Unemployment of the Unemployment Committee is of the opinion that conservation and utilization of the natural resources through existing laws and other legislation, recommended herein, can give employment to hundreds of thousands of unemployed workers, and to a considerable extent remedy the unemployment problem that now exists.

The subcommittee submits herewith its findings and recommendations on the subjects it has considered:

(1) *Soil conservation and unemployment.*—This subject has been extensively studied by the Honorable Jerry Voorhis, a member of the committee, and his report is attached hereto as exhibit 1. The committee agrees with the conclusions and recommendations set forth on pages 4 to 6, inclusive, of the report. Summarizing the recommendations, the committee recommends that legislation be enacted enabling the setting up of a soil-conservation program by the Government on a sufficiently broad scale to at least put the Nation on a maintenance basis as far as its basic resources—soil—is concerned. At present, erosion and depletion of soil resources are proceeding more rapidly than the forces of conservation. Such a situation must not continue. This program should consist in part of enabling farm owners, through Government loans at low interest rates, to carry on soil-conservation projects on their own land. Such a program would not only mean the saving of our soils for future generations; it would also mean a bolstering of the cash income of some of our most hard-pressed farm people. Five hundred thousand men could be employed for 4 years on such a program and it would have very great effect in stemming the present tide of interstate migration.

As time goes on the importance of the application of phosphates to the soil will become greater and greater. Indeed there are scientists who hold that the key to future world power may be found in the possession by certain nations of an adequate supply of phosphates.

The United States has an abundant supply of phosphate rock—most of it on publicly owned lands—but at present most of the farmers of the country are paying in the neighborhood of \$50 a ton for phosphate fertilizer. This is contrasted with a price of \$17 charged by the Tennessee Valley Authority. The committee is of the opinion that the work of the Tennessee Valley Authority in this field should be extended and similar work undertaken by other Government agencies in other parts of the country.

(2) *Conservation and reclamation projects.*—Attached hereto is exhibit 1 which is a comprehensive and interesting study by Hon. Jerry Voorhis dealing with the need of rural people for supplementary incomes; need for conservation of natural resources; and a suggested rural conservation works program. Without discussing details, the

committee approves and recommends the program as contained in this report.

The Secretary of the Interior, in correspondence with Senator Hayden, of Arizona (see exhibit 2), has proposed a long-range program of (1) reclamation of arid lands in the West, and (2) the careful conservation of water resources in the Great Plains Area to prevent to the greatest possible extent the danger of a recurrence of devastating droughts in that region. The committee recommends to the conference the favorable consideration of this proposal.

The program proposed by the Secretary would cover a 5-year period with \$5,000,000 of reimbursable expenditures and \$5,000,000 of expenditures from relief funds being made each year on small water-conservation projects—largely in the Great Plains area, and with reclamation fund expenditures of some \$50,000,000 annually on larger projects where new lands will be opened up.

(3) *Forestry—Timber.*—The committee is of the opinion that the forestry program of the Department of Agriculture should be extended to the end that a private ownership will reforest and develop, as much as possible, the depleted forest land and where not susceptible or possible for reforestation by private ownership, the Government, through its Forest Service, will protect and preserve the forest lands in the United States.

It is further recommended that other uses for forest projects, such as the pulp industry, be studied and encouraged by appropriate legislation.

In giving consideration to a national forestry program that would tend toward the greatest degree of employment in connection with the utilization of our forestry resources, it is well to take stock of the situation as it now exists.

We have in continental United States approximately 2,000,000,000 acres of land. Of this area less than one-third, or approximately 600,000,000 acres, is land susceptible to growing commercial timber.

Due to careless and thoughtless timber operations in the past, coupled with destructive forest fires, we have lost in this country nearly all of our original timber growth except that found in the Northwest States. In all other sections of the United States timber operations have been greatly curtailed, awaiting a new growth for harvest. In the three Northwest States, to wit, Washington, Oregon, and Idaho, the annual timber cut is now proceeding at a rate almost 40 percent greater than the annual growth, which if not brought into balance means that ultimately that great reservoir of timber resources will likewise be depleted.

The late Dr. F. A. Silcox, Chief of the National Forest Service, who was perhaps the best posted man in America, advocated that in order to keep a proper balance through the future years of our timber resources and obtain the highest available production, and likewise keep the greatest number of persons employed in this important activity, at least two-thirds of the timber acreage in the United States, or 400,000,000 acres must be in public ownership, either National or State. He stated further that at the present time, there is slightly less than 200,000,000 acres so owned and controlled, and that where private interests were endeavoring to operate on a portion of the 400,000,000 acres privately controlled, little progress was being made in the work of securing a sustained yield, and more important still,

the private owners cannot successfully carry through a long-time program such as is required in the growing of timber, which is from 50 to 150 years. (See exhibit 3.) Dr. Silcox, therefore, advocated that the policy should be to reverse the present situation of holdings between public and private and have at least two-thirds of the timber areas of the United States publicly owned and upon which the annual cut will not exceed the annual growth.

The situation in Europe which results in cutting off timber products and supplies to both this country and the rest of the world makes the matter of timber conservation and its relationship to unemployment more acute than ever, and creates a situation threatening to our present timber sources.

In the State of South Dakota the entire timber growth in the Black Hills is located in two national forests and both of these forests are operated on a sustained-yield basis. A large number of people are employed in the production of timber products in these forests, and the annual cut is maintained equal to the annual growth.

The receipts from timber sales are very substantial, and in these two forests we have an unusual demonstration of sustained-yield practices. In the past the practices indulged in have resulted in an almost complete destruction of our original forests.

We cannot permit ourselves to become a nation dependent upon the outside world for our timber needs. Timber production and utilization mean the employment of millions of our people. A wise National and State policy of conservation is still possible. We can rehabilitate many of those regions that are natural forest lands. We can give employment both useful and constructive to a great number of our unemployed people, in carrying out a wise State and National policy in connection with our forests. We have already made an approach to this problem in adding some 16,000,000 acres to the national forests in recent years, and in utilizing the services of thousands of our youth in the Civilian Conservation Corps camps. A replanting in forest areas on publicly owned lands has resulted in 1,700,000,000 new trees, and the job is just begun.

Forestry and the products from the forests play a far greater part in our economy today than at any time in our national history.

One reason for the devastation of forests is the unsatisfactory tax system relative to forest lands that is followed by most of the States. The tax plan of the majority of the States requires the assessment of an ad valorem tax on forest land according to the value of the land and the trees contained thereon, which makes it unprofitable to hold forest land for reforestation purposes. The result is that taxes are either not paid, or the land is stripped of all available trees large enough for use, in order to realize a sufficient sum to pay taxes.

It is quite evident that the policy followed by the States is unsound and is accounting for a large part of the devastation of our forestry resources.

The solution of this problem rests primarily on the States, but in every possible way Congress should encourage the States to alter their tax program so as to permit the profitable ownership of forest property where the same will be held for reforestation purposes.

¶ (4) *Strategic minerals.*—The committee is of the opinion that further monopolistic influence in the mining and development of strategic minerals should be avoided, and also that arrangements should be

made through existing legislation, or if this is not feasible, through the passage of appropriate legislation to enable the further development of strategic minerals by private enterprise, with governmental assistance by way of capital loans at low interest rate.

The committee finds that new mining developments are possible and would afford a considerable measure of employment. We believe that proper assistance afforded by the Government to small mine operators would result in considerable impetus of mining development.

A comprehensive report of the number of people finding gainful employment in the mining industry at the present time, together with recommendations for the development of mining of strategic minerals, has been made by the Honorable Homer D. Angell, and his report is filed herewith as exhibit 4. Also an excellent discussion of the problem by Representative Angell is filed as exhibit 5.

Your committee also invites consideration of the analysis of H. R. 8206 made by the Honorable John R. Murdock, of Arizona, in the Congressional Record for April 19, 1940.

(5) *Utilization of falling water.*—The committee is of the opinion that the development and utilization of falling waters in the United States is of paramount importance to alleviation of the unemployment problem, and that the Government should make certain that the development of sites on rivers and streams by private enterprise will be for the general public benefit. Further, consideration should be given to public development of sites where it is not possible or favorable for development to be carried on by private enterprise.

The committee has reviewed the operations of the Tennessee Valley Authority, Bonneville, Boulder Dam, Grand Coulee, Marshal Ford, and other developments where hydroelectric projects are involved primarily or incidentally. It is the opinion of the committee that monopolies in the development of these natural resources of the people of the United States should be avoided, and further, that a great deal is being accomplished by giving people employment by the Government projects above referred to.

Attached hereto is exhibit 6 which is a report on the activities of the Tennessee Valley Authority as they affect unemployment. In this report it will be noted that the construction of the dams and projects give direct employment in the actual construction work; and further, that most of the equipment and materials used in construction and development are manufactured in sections of the United States outside of the South, and thereby furnishes employment in every section.

Further, the report shows that users of electricity in the valley save a substantial amount in their power bill, and this enables them to purchase millions of dollars of electric apparatus, farm equipment, etc., and also to use their money for other purposes, all of which tends to relieve unemployment. A further result of the Tennessee Valley Authority, and similar developments, is that the purchasing power of the people in the sections involved will be increased. This improves the employment condition not only in that section, but in all sections of the United States.

The committee recommends that cooperation be given to Bonneville, Tennessee Valley Authority, and other similar developments, to the end that their true and ultimate work in regard to relieving unemployment can be realized.

(6) *New uses of agricultural products.*—Your committee further believes that by proper legislation and Governmental aid thousands of farmers can be given employment, or can be enabled to establish themselves in partial self-support, through the growing of new crops and the tilling of new land, which agricultural development would not interfere with present crops or present cultivated lands. The new crops referred to are those that have never been extensively cultivated in this country, but whose products are needed, command good prices, and have heretofore been imported. The new lands referred to are limited in area, but are those in certain favored spots on the public domain where men who have a small income and a knowledge of agriculture, such as many ex-service men, can make a part of their living from the tilling of the soil.

Respectfully submitted.

ESTES KEFAUVER,
Chairman of the Subcommittee.

JERRY VOORHIS,
JOHN MURDOCK,
HOMER ANGELL,
CHAS. H. LEAVY,
HARRY SANDAGER,

Members.

EXHIBIT 1. SOIL CONSERVATION AND UNEMPLOYMENT

By Jerry Voorhis of California

The most tragic aspect of the whole unemployment problem in the United States is the crowding of thousands of our farm people off the land that has nourished their families for generations and onto the highways and roadside camps of the far West. This is a tragic thing, not only for the migrating people—some 500,000 families strong—but also for the States, notably California, to which they go in numbers too large to be absorbed under present conditions into the economic life of these States.

Many people have gotten excited—as they should about the plight of these dispossessed farm people and about the problem faced by school districts, public hospitals, and relief agencies in the States to which they go.

But there has been little effort to analyze the cause of this migration or to work out a long-range program for the rerooting of the people on the land.

The central fact is that in some parts of the country there are just too many rural people for the land, in its present state to offer them any chance for a decent livelihood. These are the very regions from which the migrating peoples have come. The 1937 unemployment census showed that there were 705,000 totally unemployed men living on farms at that time and that the largest numbers of them, outside the Appalachian Mountain region were in the very sections from which people have been migrating most extensively in recent years. In addition, there were 576,000 farm laborers living on farms who had no other income and had employment only a part of the year. The main concentration of these people is in Arkansas and southern Missouri. Add to these the fact that half the farms of the Nation realized, even in 1929, less than \$1,000 worth of products, and that these low-income farms are located preponderantly in the same regions where we find the greatest number of unemployed farm people.

And now why are these things so? High birth rates have something to do with it, one-crop farming has a good deal to do with it, uneconomically sized farmsteads have something to do with it. And it is beyond dispute that the problem of our farm people and their migration can never be solved until the prices received by farming are at parity with the prices they must pay for what they buy from industry.

But there is no more basic cause of unemployment of farm people, of low farm income, of the uprooting of families and casting them adrift, than the exhaustion of America's basic resource—the soil itself. A study of a map of the United States showing the extent of erosion in various areas shows that the areas of most

serious erosion are again the same areas as the ones where we have found low farm income and rural unemployment.

According to a survey of erosion made in 1934 by United States Department of Agriculture 52,000,000 acres of once good land have been destroyed and can never again be expected to become productive. Another 151,000,000 acres are severely damaged, their fertility badly depleted. And 1,373,000,000 acres have been moderately or slightly damaged. Our conservation efforts are not keeping pace with the rate of exhaustion of these basic resources of our people.

Therefore, because we have over a million people substantially unemployed and living on farms, because something must be done to stem the tide of migration about the country of homeless people, because a staggering percentage of our farm families are today unable to make more than a bare subsistent living, and because our generation would be criminally negligent if it spared any effort to check the exhaustion of our life-giving soils, which exhaustion lies at the bottom of all the related problems here discussed—for all these reasons there should be launched at once, in addition to the cooperative soil-conservation program now in operation a rural conservation works program wherein unemployed and impoverished farm people can be employed both by farmers and by the Government in saving the lands of America and the prosperity of our agriculture.

To illustrate the tremendous importance and the almost unbelievable saving to be accomplished by such a program, the following facts are important. Of the total land area of the United States, 1,054,515,111 acres are in farms. From this land it is estimated that not less than 3,000,000,000 tons of soil are removed every year by erosion. In the 3,000,000,000 tons of wasted soil is the equivalent of 90,000,000 tons of phosphorus, potassium, nitrogen, calcium, and magnesium. Of this, 43,000,000 tons represent the principal ingredients of commercial fertilizer, namely, phosphorus, potassium, and nitrogen. This is more than 60 times the amount of these elements of plant food used in the United States as commercial fertilizer during the fiscal year ended June 30, 1934. At present current prices for these five plant nutrients, the annual loss represents \$6,000,000,000. With good conservation measures applied, it is estimated at least three-fourths of this annual loss could be prevented.

And while we sometimes foolishly wonder what we are to do with the labor of our army of unemployed it is pertinent to observe that the Soil Conservation Service estimates that it would require 687,000,000 man-days to accomplish the soil-conservation program which is really needed and another 87,000,000 man-days if we added necessary water conservation work—especially in the Great Plains area. Translated this means that 2,100,000 men would take a year to do it—or more practically that a half a million men working continuously could be employed at soil and water conservation jobs for upward of 4 years with inestimable profit not only to their own new meager incomes, but to the welfare of the whole United States and particularly of future generations.

Why don't we do this at once? The answer is twofold I think. First, too few Americans realize its importance. Second, it would cost a lot of money. Indeed, it is estimated that the entire job of soil and water conservation would cost somewhere around \$2,800,000,000. That is a great deal of money. But it is a small price to pay for the sake of literally saving the Nation from agricultural destitution.

Furthermore, the program need not and could not practically be completed in 1, 2, or 3 years. It should be spread over a period of time long enough not to interfere with normal farm operator's (a minimum of 5 years) and yet short enough to get the job done before any considerable additional damage has been done to our soil resources. In addition to this it must be remembered that the carrying out of this program will add substantially to the value of the land upon which it is performed and that most of this land is privately owned. Those who were benefitted in this way should properly bear a part of the cost.

A national soil, water, and forest conservation program is therefore recommended as an integral part of a concerted attack on the problem of unemployment and particularly the special problem of uprooted, homeless, wandering families. Such a program should include the following types of work:

1. Terracing.
2. Construction of diversion ditches.
3. Stabilization of drainageways.
4. Fencing.
5. Planting pastures.
6. Planting hay.
7. Lining.
8. Lime crushing or burning.
9. Contour furrow.
10. Water spreading.

11. Water-storage structures.

And these considerations should be observed in planning the financial aspects of the program:

(1) Where soil-conservation work will add substantially to the value of the land upon which it is performed, the owner of such land should either perform such work himself through loans, or a combination of loans and grants, or, where the work can best be performed through Government projects, agree to repay to the Government a proper percentage of its costs, or stand a proportionate share of the total expense through contributions of material, equipment, or labor.

(2) On the other hand, it would be proper for the Government to bear the entire cost of conservation work where such work added little or nothing to the income or sale value of the farm and was undertaken primarily to protect other lands, public properties, or utilities, such as highways, reservoirs, etc., or otherwise protect the public welfare rather than enhance the value of the owner's interest. Also where the owner of the land himself might qualify as in need of public assistance, or a needy tenant where proper leasing arrangements could be worked out to assure the benefits to the tenant, it would be appropriate for the Government to bear the entire cost.

(3) In the case of projects involving public employment and purchase of materials and equipment, the determination of the portion of the total cost which the land owner should repay would become an important consideration.

(4) Where conservation work is prosecuted by the owner of the land through loans rather than by the Government, unusually favorable terms for such loans involving deferred interest and principal payments, until benefits began to be realized, or involving nominal rates of interest, would be justified from the standpoint that in all conservation work there is a degree of benefit to society as a whole. Favorable terms probably would be necessary as an inducement if any substantial number of private owners were to borrow money for conservation purposes. Lower interest rates or more favorable repayment terms, or both, might be made available to landowners who would agree to employ families certified as in need by Federal or local relief officials, while less favorable terms might be required where the borrower desired to employ other than needy people.

(5) For obvious fiscal reasons, as much emphasis as possible should be placed upon conservation work of a self-liquidating character, i. e., self-liquidating in the sense of repayment to the Government.

Funds for this work should be and can be made available without the payment of any interest whatsoever. The issue by the Treasury of non-interest-bearing soil-conservation bonds could be authorized by Congress. These bonds could be deposited with the Federal Reserve banks as security for an extension of credit to the Treasury of an amount equal to the face value of the bonds. The bonds could be made redeemable by the Treasury in cash under certain conditions, and could be retired by means of regular annual payments to the banks over a period of years. The only difference between this arrangement and the present transactions whereby the Federal Reserve banks buy bonds from the Treasury would be that presently issued bonds bear interest and are retired at maturity whereas the soil-conservation bonds would not bear interest and would be retired in annual installments. These credits could be used either for loans at 0 percent or 1 percent interest to farmers for supervised soil-conservation work or for the payment of wages to persons hired by Government agencies to do the work.

Here is work that America needs to have done if she needs anything at all. Here are employment opportunities for some of the very poorest, most distressed people of our Nation. Here is the way to enable our people of miserably low income from their lands to add some desperately needed cash income to the family budgets. Here is the way to stop at its source, the interstate migration which threatens the happiness and even the peace of so many people and so many sections of our country. Here are work projects that no one will dare to criticize. Here is a task worthy of a great Nation.

EXHIBIT 2

THE SECRETARY OF THE INTERIOR,
Washington, January 18, 1940.

Hon. CARL HAYDEN,
United States Senate.

MY DEAR SENATOR HAYDEN: Your letter dated December 18, 1939, discusses the long-continued drought in the Western States which has created a human problem of great magnitude. It also suggests that steps toward a solution of

this problem are possible by a comprehensive program of water conservation and irrigation, and by extending the usual operations of the Bureau of Reclamation.

There are two distinct phases of the human problem caused by the extended drought: First, that of anchoring insofar as possible the remaining population in the drought areas and this can be accomplished in part through irrigation developments; and, second, that of providing opportunities for the rooting in new soil of the people who have drifted to the far Western States from other areas, and this can be achieved in part by the completion of irrigation projects to utilize the water resources as yet unconserned in those States.

For a full decade now the drought has continued. While the area most critically affected has shifted from year to year, the general focus has been on the Great Plains area. In 1934 and again in 1936 severe drought was general in the West. While each new season has brought renewed hopes for general relief, the last 4 months of 1939 were drier over wider regions than any others in the decade. There are several reasons to fear that the worst has not as yet been experienced. Depletion of underground water and soil moisture has been so great that even normal rainfall in 1 or 2 years may not bring full relief.

That the migration westward of homeless people is keyed largely to the drought, although not all the migrants are from critical drought areas, has been widely assumed. The migration was reduced in 1937 and again in 1938, but it picked up sharply and coincidentally with the pinch of the severe 1939 drought.

Reliable estimates place at 75,000 families the number of which has left the Great Plains drought area alone during the decade. More may have to go unless succored. Reliable information indicates that during the 10-year period 110,000 families migrated to California; 18,000 to Washington; 18,000 to Oregon, and 7,000 to Idaho. These were homeless people. Not all, however, were made homeless by drought. Some were cut loose from their moorings in other areas in other ways. It matters little to the victim or to the Nation, once the migrant has joined the hopeless army, what forced his enlistment.

The squads from this army which have been able to relocate themselves make up, according to the best estimates, only a very small percentage of the total number.

For the most part, the migrants are worthy people. They are victims of circumstances beyond their control. They place a responsibility upon their Government. This responsibility largely has been met so far by expedient and temporary measures.

Both in the critical drought area in the Great Plains and in the far Western States disproportionately high relief expenditures have resulted. As you suggest in your letter, the time probably is overdue when we look to such corrective work as can be undertaken.

Last year a start along this line was authorized with the appropriation of the Interior Department Appropriation Act of 1940 of \$5,000,000 to develop a few irrigation projects in the Great Plains and other arid and semiarid regions on which this appropriated and some relief funds might be used. Several of these projects are now underway in Montana, North Dakota, and South Dakota. They must of necessity born of the meager water supplies available near usable lands be small, and they must because of relatively high per acre cost be separated from the usual Federal reclamation projects since they cannot be expected to return directly in dollars to the Treasury the full amount of their construction costs. In savings in future relief expenditures and in the prevention of human misery, however, they will make up the deficit uncounted times.

A program involving approximately \$5,000,000 a year on a reimbursable basis for projects of this type and relief and non-reimbursable expenditures of \$5,000,000 to \$7,000,000 a year seems indicated. I am furnishing, as you suggested, an outline of a 5-year program proposed by the Bureau of Reclamation of this size, which could be carried forward efficiently.

Many of the projects proposed are far removed from the centers of relief load, and camp housing frequently will be necessary. This suggests the possibility that Civilian Conservation Corps camps might advantageously be used where relief laborers are deficient in number. Such construction provides excellent training and educational advantages for the young men of the Civilian Conservation Corps.

There can be no doubt that irrigation can and must occupy a prominent place in the plans for the stabilization of the Great Plains.

Now, turning to the other phase of the problem—that of providing new opportunities for the migrants—the new reclamation projects in the West provide the logical answer. Such great developments as Grand Coulee Dam, and others

only smaller in size, will offer many new homes. At least \$50,000,000 to \$60,000,000 each year for several years to come could well be used by the Bureau of Reclamation in the construction of projects of this type which are wholly reimbursable.

An attempt was made by the Congress at its last session to give the penniless but worthy drought victims an equal opportunity to obtain such homesteads on irrigation projects as might be made available this year. The operation of another statute which expires in February 1940, however, through the granting of a 90-day preference to veterans, has made the new statute virtually inoperative. The homesteads were taken by veterans. Such matters as these should be taken care of in order to insure the most sensible use of the new lands to the greatest public good.

Sincerely yours,

HAROLD L. ICKES,
Secretary of the Interior.

EXHIBIT 3

Monopoly ownership of timber resources of United States

Total stand of saw timber in acres, 1930	1 188, 645, 000
Total stand of saw timber owned by 160 largest private companies in acres, 1938	2 39, 025, 984
Percentage of total stand owned by 160 largest private companies	0, 259
Total stand of saw timber owned by 16 largest private companies in acres, 1938	3 16, 184, 239
Percentage of total stand owned by 16 largest private companies	0, 085

¹ Statistical Abstract of the United States, 1938, table No. 686, p. 688.

² Compiled from Forest Service lists.

³ Ibid.

Private forest-land ownerships of 100,000 acres or over

[Compiled from Forest Service lists]

Northern Pacific Ry. Co.	1, 977, 000
(See also Northwestern Improvement Co.)	
Southern Pacific Land Co. (California)	1, 750, 000
(S. P. R. R. Co. and Albion Redwood Co.)	
Great Northern Paper Co. (Maine)	1, 500, 000
Consolidated Naval Stores (Florida)	1, 300, 000
Dierks Lumber & Coal Co. (Oklahoma, Arkansas)	1, 196, 452
Weyerhaeuser Timber Co. (Washington, Oregon)	1, 182, 000
(Also 6 subsidiaries q. v.)	
International Paper Co. (Maine, New Hampshire, New York, Vermont)	1, 010, 818
Southern Kraft Corporation (Alabama, Arkansas, South Carolina, Louisiana, Florida, North Carolina, Mississippi)	958, 770
(International Paper Co.)	
Pingree, D., et al. (Maine)	944, 000
Red River Lumber Co. (California)	850, 000
Anaconda Copper Mining Co. (Montana)	791, 000
Southwestern Settlement & Development Corporation (Texas)	725, 000
Long Bell Lumber Co. (Arkansas, Missouri, California, Oregon, Mississippi, Texas, Washington)	564, 129
(See Long-Bell Creosoting Co.)	
Kirby Lumber Corporation (Texas)	500, 000
Dunn, C. B., et al. (Maine)	480, 000
Brown Co. (Maine, New Hampshire, Vermont)	455, 070
Norfolk & Southern (North Carolina)	450, 000
(Roper Lands.)	
St. Joe Paper Co. (Florida)	450, 000
Crossett Lumber Co. (Arkansas, Louisiana)	445, 905
(See Crossett-Western Co. and Jackson Lumber Co.)	
Cleveland Cliffs Iron Co. (Michigan)	413, 660
Hollingsworth & Whitney (Maine)	388, 000
Gaylord Container Corp., St. Louis, Mo. (Louisiana)	365, 000
Eastern Mfg. Co. (Maine)	350, 000
(See Passamaquoddy Land Co.)	
Ford Motor Co. (Michigan)	317, 920
(See Fordson Coal Co., and Henry Ford.)	

Private forest-land ownerships of 100,000 acres or over—Continued

St. Regis Paper Co. (New York, Florida)	317, 033
(See New Hampshire-Vermont Lumber Co.)	
West Virginia Pulp & Paper Co. (South Carolina, West Virginia, North Carolina)	312, 129
West Virginia Coal, Iron and Railroad Co. (Alabama, Tennessee)	312, 000
(Owned by United States Steel Corporation.)	
Maine Seaboard Paper Co. (Maine)	300, 000
Potlatch Forest, Inc. (Idaho)	286, 000
(See Weyerhaeuser Timber Co.)	
Brooks-Scanlon Corporation, Foley (Florida)	280, 000
(See Brooks-Scanlon and Brooks-Scanlon Corporation.)	
Pearl River Valley Lumber Co. (Mississippi)	270, 000
Frost Lumber Industries, Inc. (Louisiana, Texas)	264, 305
(See Union Sawmill Co.)	
Longyear, J. M. Est. & Keweenaw Land Association (Michigan)	262, 500
Boise, Payette Lumber Co., Boise (Idaho)	260, 000
(See Weyerhaeuser Timber Co.)	
Colorado Fuel & Iron Corporation (Colorado)	251, 000
Brown Paper Corporation (Brown Paper Mills Co., Inc.) West Monroe (Louisiana)	250, 000
Pocahontas Coal & Coke Co. (West Virginia)	250, 000
(See Norfolk & Western R. R.)	
Putnam Lumber Co. (Florida)	250, 000
Fall Timber, Trout Creek Lumber Co. (Louisiana)	240, 000
St. Croix Paper Co. (Maine)	239, 000
Southern Pine Lumber Co. (Texas)	233, 671
Union Sawmill Co. (Arkansas)	229, 379
(See Frost Lumber Industries, Inc.)	
Garfield Land Co. (Maine)	220, 000
Bowman-Hicks Lumber Co. (Oregon)	219, 000
Shevlin Hixon Co. (Fremont Land Co.) (Oregon)	218, 000
Alger-Sullivan Lumber Co. (Alabama)	211, 000
(Century, Fla.)	
Superior Pine Products, Inc. (Georgia)	210, 000
Milwaukee Land Co. (Washington, Idaho)	209, 000
Richmond Cedar Works (North Carolina, Virginia)	207, 000
Passamaquoddy Land Co. (Maine)	204, 325
(See Eastern Manufacturing Co.)	
Cassidy, James W., et al. (Maine)	200, 000
Georgia Power Co. (Georgia)	200, 000
(See Commonwealth & Southern.)	
Patterson-McInnis (Florida)	200, 000
Menominee Indians (Wisconsin)	195, 380
Diamond Match Co. (California)	192, 000
Kimberly Clark Corporation (Michigan)	191, 070
Goodyear Lumber Co., Picayune, Miss. (Mississippi)	189, 000
Texas Longleaf Lumber Co. (Texas)	187, 780
Oliver Iron Mining Co., Duluth (owned by United States Steel Co.)	
(Michigan, Minnesota)	187, 256
Tremont Lumber Co. (Louisiana)	188, 000
Pickering Lumber Co. (Louisiana, California)	179, 283
Finch, Pruyn & Co., Inc., Glens Falls, N. Y. (New York)	177, 826
Breeze, Geo. E., Lumber Co., Albuquerque, N. Mex. (New Mexico)	175, 000
Crown-Willamette Paper Co. (Oregon, California)	174, 000
(See Crown-Zellerbach Corporation.)	
Metropolitan Life Insurance Co. (North Carolina)	167, 000
Cascade Lumber Co. (Washington)	166, 000
Smith, W. T., Lumber Co. (Alabama)	162, 000
(See Ray Sawmill Co.)	
Butterfield, Jerome, et al. (Maine)	160, 000
Mrs. Ruth Hanna Simms (Colorado)	158, 000
Carter, W. T., & Bros., Houston (Texas)	156, 900
Peavy-Wilson Lumber Co. (Florida, Louisiana)	155, 000
Somers Lumber Co. (Montana)	154, 000
Philadelphia & Reading C. & I. Co. (Pennsylvania)	151, 939

Private forest-land ownerships of 100,000 acres or over—Continued

Container Corporation of America (Florida)	150,000
Gibbs Bros. Co., Huntsville (Texas)	150,000
Miller, T. R., Mill Co. (Alabama)	150,000
Southern Advance Bag & Paper Corporation (Louisiana)	150,000
Central Penn Lumber Co. (Pennsylvania)	146,417
Union Bag & Paper Corporation (Georgia)	144,000
(See Union Bag & Timber Co.)	
Sumpter Lumber Co. (Mississippi)	143,758
New Hampshire-Vermont Lumber Co. (Vermont)	143,000
(See St. Regis Paper Co.)	
Rayonier, Inc. (Florida, Georgia)	140,980
(See Crown-Zellerbach Corp.)	
Penobscot Development Co. (Maine)	140,000
Piscataquis Land Co. (Maine)	140,000
Hammond Redwood Co. et al. (California)	139,300
(See Hammond Lumber Co.)	
E. S. Collins (California, Oregon, Pennsylvania)	138,600
(Also see Grand Ronde Pine Co.)	
Reigel Paper Co. (North Carolina)	137,000
Dantzler, L. N., Lumber Co. (Mississippi)	136,000
Santee River Cypress Lumber Co. (South Carolina)	136,000
Calumet & Hecla Copper Co. (Michigan)	135,600
Model Land Co. (Florida)	135,000
Ingram-Day (Alabama, Florida, Mississippi)	134,000
Stearns Coal & Lumber Co. (Michigan, Tennessee, Kentucky)	133,087
Jackson Lumber Co. (Alabama, California, Florida)	132,220
(See Crossett Lumber Co.)	
Camp Manufacturing Co., Franklin, W. Va. (Virginia, North Carolina)	130,000
Vermejo Park Club (New Mexico)	130,000
Scotch Lumber Co. (Alabama)	129,000
Knabb Interests (Florida)	128,360
Crown-Zellerbach Corporation (Washington)	128,000
(See Crown-Willamette Paper Co. and Rayonier, Inc.)	
Hill, Louis W. (Oregon)	127,000
Eastern Oregon Land Co. (Oregon)	126,000
Angelina County Lumber Co. (Texas)	125,000
Bradley Lumber Co., Warren, Ark. (Arkansas)	121,951
Minnesota & Ontario Paper Co. (Minnesota)	121,000
Foremost Properties, Inc. (Florida)	120,000
New Mexico Lumber & Timber Co. (New Mexico)	120,000
Krumenacker Lumber Co. (Pennsylvania)	115,000
Lewin & Gex (Florida)	114,000
Lutcher-Moore Lumber Co. (Louisiana)	113,135
Crowell-Spence (Louisiana)	112,591
Consumers Power Co., Jackson, (Michigan)	111,160
(See Commonwealth & Southern.)	
Industrial Lumber Co. (Louisiana)	110,000
Union Lumber Co. (California)	107,942
(See Mendocino Lbr. Co.)	
Wisconsin Land & Lumber Co. (Michigan)	106,304
Virginia Coal & Iron Co. (Kentucky, Virginia)	106,000
Hines, Edw. Lumber Co., Park Falls, Wisc. (Wisconsin)	105,548
Wood Preserving Corporation (Tennessee)	105,000
Fordson Coal Co. (Kentucky)	103,000
(See Ford Motor Co.)	
Marquette Land Co. (Michigan)	102,420
Cummer Sons Cypress Co. (Florida)	102,000
Republic Steel Co. (Alabama)	102,000
Allison Lumber Co., Bellamy, Ala. (Alabama)	100,000
Brunswick Peninsula Co., Brunswick, Ga. (Georgia)	100,000
Wm. Cameron & Co., Inc., Waco, Tex. (Texas)	100,000
Coal Creek Mining & Lumber Co., Knoxville, Tenn. (Tennessee)	100,000
Gauley Coal & Land Co., Rupert, W. Va. (West Virginia)	100,000
Girard Trust Co., Philadelphia, Pa. (New Jersey)	100,000

Private forest-land ownerships of 100,000 acres or over—Continued

Hassell & Haggard Heirs, et al., Waynesboro (Tennessee)	100,000
Louisiana Longleaf Lumber Co., Fisher, La. (Louisiana)	100,000
McCrory Lands, Orlando, Fla. (Florida)	100,000
Masonite Corporation, Laurel, Miss. (Mississippi)	100,000
Natalbany Lumber Co., Natalbany, La. (Louisiana)	100,000
Pace Co., Pensacola, Fla. (Florida)	100,000
Ed Sargent, Chama, N. Mex. (New Mexico)	100,000
Schwing Lumber & Shingle Co., Plaquemine, La. (Louisiana)	100,000
Urania Lumber Co., Urania, La. (Louisiana)	100,000
Weston Lumber Co., Bay St. Louis, Miss. (Mississippi)	100,000
Berwind White Coal Corporation (Kentucky)	100,000
Hammond Lumber Co. (Oregon)	97,000
(See Hammond Redwood Co.)	
Henry Ford (Georgia)	90,000
(See Ford Motor Co.)	
Northwest Paper Co., Cloquet, Minn. (Minnesota)	87,236
(See Weyerhaeuser Timber Co.)	
Northwestern Improvement Co. (Montana)	86,000
(See Northern Pacific Ry. Co.)	
Brooks-Scanlon Lumber Co. (Oregon)	79,000
(See Brooks-Scanlon or Brooks Scanlon Corporation.)	
Crossett-Western Co. (Oregon)	77,000
(See Crossett Lumber Co.)	
Southern Lumber Co. (Arkansas)	72,166
(See Weyerhaeuser Timber Co.)	
Alabama Power Co. (Alabama)	72,000
(Subsidiary of Commonwealth & Southern.)	
Long-Bell Creosoting Co. (Louisiana)	70,140
(See Long-Bell Lumber Co.)	
New River-Pocahontas Co. (West Virginia)	68,378
(See Berwind White Coal Corporation.)	
Tennessee Land Co. (Alabama)	64,000
(United States Steel Co.)	
Albion Redwood Co. (California)	62,900
(See Southern Pacific Land Co. and Southern Pacific R. R.)	
Fisher Body Corporation (Michigan)	61,584
(Owned by General Motors Corporation.)	
Ayer Lord Tie Co. (Mississippi, Alabama)	55,000
(See Wood Preserving Corporation.)	
Union Bag & Timber Co. (Florida)	51,590
(See Union Bag & Paper Co.)	
Fisher Lumber Co. (Louisiana)	48,669
(Owned by General Motors Corporation and Fisher Body Co.)	
Sound Timber Co. (Washington)	40,000
(See Weyerhaeuser Timber Co.)	
Mendocino Lumber Co. (California)	37,058
(See Union Lumber Co.)	
Grand Ronde Pine Co. (Oregon)	28,000
(Owned by E. S. Collins.)	
Kentland Coal & Coke Co. (Kentucky)	25,000
(See Berwind White Coal Corporation.)	
Ray Sawmill Co. (Alabama)	22,000
(See W. T. Smith Lumber Co.)	
Weyerhaeuser Realty Co. (California)	21,240
(See Weyerhaeuser Timber Co.)	

NOTE.—This gives no indication of the quality or density of the stand on each acre.

EXHIBIT 4.—MINING WAGE EARNERS

The gainful direct employment in mining is relatively small compared with processing and indirect employment. In the United States as a whole there is only 1 wage earner in mining to 10 wage earners in industry.

The following table from United States Department of Commerce statistics shows mining wage earners in the principal western States and the number of industrial workers per mine worker.

State	Number of mining wage earners	Industrial worker per miner
Arizona	6,258	0.8
California	33,895	7.2
Colorado	14,202	1.6
Idaho	4,152	2.5
Montana	9,461	1.0
Oregon	1,841	28.0
Utah	7,556	1.5
Washington	3,958	20.6

This table shows that mining activity in Oregon and Washington has lagged behind other States, and that Arizona, Colorado, Idaho, and Montana have largely exported their minerals in an unfabricated state, and imported their mining supplies and materials.

The Northwest has the following strategic minerals which are now nationally imported. This classification was taken from War Department official lists.

Strategic minerals vital to national defense located in the Northwest

Mineral:	Remarks
Antimony	Essential military shells and auto batteries.
Chromium	Stainless steel.
Magnesium	Metal of future; airplanes.
Manganese	Vital to steel industry.
Mercury	Explosives.
Mica	Electrical industry; automobiles.
Nickel	Steel industry and munitions.
Tin	Containers.
Tungsten	Automobile and steel..

CRITICAL LIST NORTHWEST MINERALS, WAR DEPARTMENT OFFICIAL LISTS

Lead, graphite, zinc.

ESSENTIAL LIST—NORTHWEST MINERALS

Copper, gold.

COMMERCIAL LIST—NORTHWEST MINERALS

Bismuth, china clay, diatomite, feldspar, gypsum, iron, limestone, phosphate, silica, silver, talc.

Mining furnishes a substantial indirect pay roll for supplies and materials used in mining, for transportation, clerical help, and trade. In the Western States cited 20 to 33 percent of the value of the mined product goes into mining supplies and materials. Conservatively the indirect pay roll is nearly double the direct pay roll.

Direct mining employment is not the measure of value of the mining industry. Its chief value lies in the national or regional wealth it produces and the indirect and industrial pay roll it creates. To secure national industrial independence we must produce rather than import our strategic and critical minerals.

There is no direct means of measurement available for the possible additional direct mining pay roll in the Northwest. The extent of the cited minerals in the region has not been fully explored, neither has full information been secured on the quality. However, it is known that the quality approaches the lower grade. The large extent of the magnesium and mercury deposits is fairly definitely established. The United States Geological Survey and the Bureau of Mines are now exploring the chrome and manganese occurrences. Electrochemical and electrometallurgical technology is the avenue to be used to overcome the commercial handicap of low-grade ores. This has been worked out for chrome, manganese, and magnesium by the United States Bureau of Mines and Washington State College at Pullman. To release the remaining listed minerals for commercial use further exploration and research is necessary. As an example of the fact that the direct mining pay roll is not the real measure of intrinsic worth of the mining industry it can be cited that all the iron mines in the United States had only

14,873 direct wage earners. The steel furnaces and rolling mills in the same period employed on the average 359,630 wage earners or 24.1 industrial workers per mine worker.

With the present state of our knowledge as to the occurrences, quality, and transportation requirements of the Northwest's mineral resources the best that we can do is to roughly estimate from statistical analysis, and comparisons with other States, the probable additional direct mining employment under existing known conditions.

Such an estimate of additional mining wage earners of all classes—metallic and nonmetallic is as follows:

Low direct employment estimate would be about 70 percent of present mine employment in Oregon and Washington or additional wage earners	4,000
Conservative upper estimate 22 percent of existing California employment	7,400

or

The indirect ratio can be conservatively taken as 60 percent of the national average or 1.6 indirect employees in all classifications per 1.0 mining wage earners.

The industrial ratio also to be conservative can be taken as 25 percent of the national average or 35 percent of the California ratio.

Summarizing these rough estimates we secure the following on mining and allied wage earners:

	Lower range	Upper conservative range
Direct mining employment	4,000	7,400
Indirect employment	6,400	11,800
Industrial employment fabricating all classes of mineral products	10,000	18,500
Total	20,400	37,700

In making these estimates the intent was to base the same on known facts and to be conservative.

The direct mining and industrial employment based on mining alone, cited above, represents a 10 and 18.5 percent increase over the last reported existing total mining and industrial employment in Oregon and Washington.

The complete Bonneville plant will have sufficient available capacity to make such employment possible. The time that this employment can be reached will depend on the program of exploration research, construction, and marketing.

This industrial employment applies only to minerals, and does not include industrial activity represented by steel, forest product, agricultural, and general manufacture. These would be in addition to the mining activities.

The total over-all industrial direct employment from Bonneville can fall into four possible classifications depending on the type of industry contracted. These are:

- (1) Basic industries with a small ratio of undistributed satellite industries, represented by 28.2 wage earners per 1,000 horsepower. This is the situation at Niagara Falls, N. Y. 12,400
- (2) Ditto with larger number of smaller industries. Conditions similar to Niagara County, N. Y., or 42 direct wage earners per 1,000 horsepower. 18,300
- (3) 33 percent of present industrial employment in Oregon and Washington or 100 wage earners per 1,000 horsepower. Fair distribution of smaller industries induced by the basic industries. 44,000
- (4) National average of ratio of basic to distributed industries or 153 wage earners per 1,000 horsepower. 67,500

These over-all industrial employment figures are based on total Bonneville installed and available horsepower. Indirect employment of 1.0 to 2.0 per industrial worker is in addition to the above.

EXHIBIT 5. A COMMERCIAL, ECONOMIC, SOCIAL, AND DEFENSE ANALYSIS OF STRATEGIC AND CRITICAL MINERAL PROBLEM

By Homer D. Angell, M. C.

The importation of strategic and critical minerals is a national problem of sizable proportions. Aside from the interest in, and the necessity for providing for the common defense, this mineral situation has pretentious economic, commercial, and social aspects. This mineral importation represents an average annual value of about 86 percent of the total metal production in the United States. It also represents an employment displacement equal in number to our total direct metal mining wage earners.

Raw mineral ores—metallic and nonmetallic—and synthetic agricultural products, constitute the base on which modern industrial activity rests. What we now see in Scandinavia is a struggle for the control of iron ore, which is perhaps the principal industrial metallic material.

Congress is appropriating large sums for military and naval expansion. How effective will these appropriations be unless we remove the bottle necks created by a deficiency of strategic and critical materials? To make these defense appropriations more effective, we must definitely solve this material problem. Aside from being our principal defense problem, it is one of our outstanding commercial, economic, and social questions. Nationally we need to know where we stand.

I have long thought of coupling Bonneville with the latent resources of the Northwest. This is the motivating reason for my research in this field. My study confirms this early judgment, but at the same time impresses me with the seriousness of the national problem.

HISTORY OF THE PROBLEM

This is no new problem. We first knew of it from our unfortunate and demoralized industrial experience in World War number one. We then became suddenly aware of our lack of essential materials. In a quick attempt to cure the situation we hastily conceived and executed a wasteful and extravagant program. Submarines and military appropriation of transports, cut off the essential material sources at a time when our War and Navy Departments were speeding up the industrial machine. In 1917 we had no advance plan when the emergency struck us from industrial chaos.

In the Defense Act of 1920, Congress placed upon the Assistant Secretary of War the responsibility of providing a plan for industrial mobilization and the procurement of necessary materials. As a result of this charge, progress has been made, but this planning has brought to the front our supply-base weakness.

About 1922 the War Department sought the suggestions of a joint committee from the two national mining societies. In 1924 this joint committee recommended—

(1) The purchase, importation, and storage of stock piles of these strategic and critical materials.

(2) The discouragement of artificial domestic stimuli such as tariffs and subsidies.

These two suggestions were not made the base for any legislation nor was the manganese stock pile suggestion, incorporated in the 1927 annual report of the Secretary of War, formally presented to Congress. Wartime strategic mines, with the collapse of high prices, were forced to shut down. A demand for tariff protection followed, which resulted in a mild inclusion in the Tariff Act of 1922. These duties were increased in the act of 1930. Duty on two of these materials has been reduced by reciprocal trade agreements, namely, manganese and a special grade of mica. Tariffs failed to solve the problem.

In 1931 the War Department again requested a mineral report from a group of outstanding mining engineers. This group reported the same conclusions as the 1924 group, with the addition of a recommendation "for concrete research by the proper Government agencies, to the end that fully demonstrated methods (for exploiting submarginal domestic deposits) * * * may be in hand on the eve of a war emergency." In 1934 the President's Mineral Planning Committee made the same recommendations.

In 1938 the Director of the United States Bureau of Mines urged the mining industry to support the recommendations of these committees with the additional suggestion that \$500,000 be appropriated annually for investigation and study of means to use our domestic reserves as a permanent solution of the problem.

In June 1939 Congress passed the Thomas Act, authorizing \$100,000,000 a year for a 4-year purchasing program of strategic minerals for stock piles. In addition

this bill authorized \$500,000 annually for 4 years for investigation of domestic resources of these minerals with the view of stimulating domestic production.

This legislation is a step in the right direction. However, it would seem that we need to go still further. Safeguarding stock piles for a long period is not practical. Nationally we need to be independent. This requires that we know what we really have, how to use submarginal deposits, and how to develop substitute processes and materials. In short, there is a large field for research based on a real inventory of assets.

PRINCIPAL INDUSTRIAL MATERIALS

Finch and Farness in their Analysis of the Strategic Mineral Problem list the following principal industrial materials:

Metals

aluminum	iron	nickel
antimony	lead	tin
chromite	manganese	tungsten
copper	mercury	zinc

To this list should be added the metal of the future, magnesium.

Nonmetals

asbestos	gypsum	potash
barite	magnetite	pyrites
china clay	mica	sulphur
coal	nitrates	talc
fluorspar	petroleum	
graphite	phosphates	

PRODUCTION ABILITY

As an index covering the production ability of the principal nations of the world, I am presenting table 1.

TABLE 1.—*Production ability of principal countries to supply primary industrial metals*

Number of metallic and nonmetallic ores available and controlled, or not available for domestic consumption out of 12 primary metals and 18 primary nonmetallic ores. This table indicates number of ores but is not an index of quantity or quality)

Country	Number metallic ores		Number nonmetallic ores	
	Available	Not available	Available	Not available
United States	5	7	7	9
United Kingdom	10	2	13	3
France	4	8	6	10
Germany	0	12	6	10
Italy	5	7	8	8
Japan	2	10	7	9
Belgium	1	9	0	16

(Data derived from chart, p. 2, of Analysis of Strategic Mineral Problem of United States, by Finch and Farness, U. S. Bureau of Mines.)

This table only covers supply self-sufficiency of materials. It is a material number index only, and furnishes no measure of quantity or quality available in each country. However, it does show that we do not have the material independence of the United Kingdom. In number of available materials we rank next to Britain. This table also points out, impressively, the plight of Germany, Japan, and Belgium. A full understanding of this table will explain existing world-wide conditions.

STRATEGIC MATERIALS

Strategic materials are defined as those essential materials on which supply reliance must be placed on foreign sources. Critical materials can also be defined as those defense materials presenting some difficult procurement problems but of a less serious nature than the case of strategic materials. The critical-materials

problem requires research and legislation to control conservation and distribution. The Munitions Board's listing of strategic and critical minerals is as follows:

STRATEGIC MINERALS IN ORDER OF PRIORITY

Manganese	Nickel	Iodine
Chromium	Quartz crystals	Mica
Tin	Aluminum	Mercury
Tungsten	Antimony	

ALPHABETIC LIST CRITICAL MINERALS

Abrasive	Helium	Potash
Arsenic	Iron and steel	Refractories
Asbestos	Lead	Sulfur and pyrites
Cadmium	Magnesium	Titanium
Copper	Molybdenum	Uranium
Cryolite	Petroleum	Vanadium
Fluorspar	Phosphate	Zinc
Graphite	Platinum	Zirconium

IMPORTATIONS

In tables 2 and 3 is presented data on the importation of strategic and critical metals. These data were independently worked out from material in Roush's Strategic Mineral Supplies and the Mineral Yearbooks of the United States Bureau of Mines. Importations fluctuate from year to year because of the business cycle and also because of importations for industrial stocks. I have, therefore, tabulated the fluctuations both in the good and lean years and have struck off a mean value, which is the basis of these tables. I have added magnesium to the list prepared by the experts in this field. Magnesium is the metal of the future. It is lighter than aluminum and much stronger, and, in addition, will furnish a limited substitute for tin products. There are extensive deposits of this basic ore in the Northwest. This metal can help solve our deficiency problem. Germany is developing magnesium for airplane construction from much lower grades of ore than are found in the Northwest.

TABLE 2.—Strategic metals

Metal	Unit of measurement	Long-time average apparent consumption	Long-time average apparent domestic production	Equivalent imported consumption	Average price per unit	Value of average imports
Bauxite ore (aluminum).	Metric ton	540,000	320,000	220,000	\$6.50 per ton	\$1,430,000
Antimony	do	12,360	2,050	10,310	\$0.11 per pound	2,500,000
Chromium	do	183,300	7,800	181,500	\$24 per ton	7,200,000
Iodine	Pound	1,349,000	274,000	1,075,000	\$1 per pound	1,075,000
Manganese	Metric ton	561,400	41,400	520,000	\$16.70 per ton	8,700,000
Magnesium	Short ton			14,000	\$300	4,200,000
Mercury	Pound	2,038,000	1,071,000	960,000	\$91 per flask	1,150,000
Mica	Short ton			5,200	721 per ton	36,000
Nickel	do	22,300	300	22,200	\$700 per ton	15,540,000
Tin	Long ton	63,500	(1)	63,400	\$0.45 per pound	63,800,000
Platinum	Troy ounce	228,000	46,000	183,000	\$28.50 per ounce	5,220,000
Tungsten	Short ton	3,225	1,225	2,000	\$1,075 per ton	2,150,000
Total						113,886,000

¹ 14-year average, since time that domestic ore production was curtailed.

² Chromium consumption has materially increased in last few years. The figures presented represent modern use, since advent of stainless steel.

³ Last 6-year average, since the start of American production.

⁴ Taken from value of imports, rather than unit price, as manganese content of ore varies widely.

⁵ Estimated on basis of modern development.

⁶ Based on commercial flasks of 76 pounds.

⁷ Based on total difference of imports and exports. There are so many different grades of mica imported that a single price will not be representative of all mica importations.

⁸ Practically none.

NOTE.—Consumption, imports, and prices fluctuate from year to year. These tabular quantities do not represent any specific year but are a composite average of boom and depression years derived from graphs plotted from data given in the Mineral Yearbooks and Roush's Strategic Minerals in order to set a composite average apparent long-time average and to eliminate fluctuations resulting from stocking imports.

Minerals:	Value of imports
Abrasives	\$5,768,500
Arsenic	723,400
Asbestos	8,315,400
Cadmium	1,080,000
Copper	24,000,000
Cryolite	1,134,000
Fluorspar	390,000
Graphite	560,000
Lead	656,000
Molybdenum	59,000
Phosphate	2,585,000
Potash	16,850,000
Titanium, uranium, vanadium	811,000
Zinc and zirconium	800,000
Total	63,723,300

¹ Estimated on basis of 480,000,000 pounds at 5 cents per pound.

It will be noted that the annual mean importations of strategic and critical minerals total \$177,600,000. When this total is compared with the total annual value of the products of metal mines in the United States the significance of this problem is apparent. The 1935 value of products of all metal mining industries in the United States is given by the United States Department of Commerce as \$206,000,864.

MINING EMPLOYMENT

There is a direct relationship between the value of mining products and the number of employed wage earners. To show this relationship, I have compiled table 4, from data in the Department of Commerce's 1939 edition of Industrial Market Data Handbook of the United States.

TABLE 4.—Relationship—Value of products and number wage earners—Metal Mining

State	Value of product	Expenditures for materials and supplies	Number wage earners
California	\$30,550,658	\$7,422,051	12,021
Colorado	12,988,490	5,113,780	5,574
Idaho	14,137,051	2,934,283	3,754
Montana	25,481,248	9,067,192	6,950
Nevada	12,120,855	3,492,496	3,663
Oregon	1,776,157	660,543	1,321
Utah	20,728,634	4,584,036	4,528
Total	117,783,125	33,274,983	37,811

COMPOSITE AVERAGES

Number mine wage earners per million value of products	331
Expenditures, materials and supplies per million of product	\$283,000
Expenditure of materials and supplies per million of products	46
Total wage earners in mining and fabrication of mining supplies per million-dollar value of mining product	367

Calculated from Statistical Data in United States Department of Commerce's Industrial Market Data Handbook, 1939 ed.

Based on the given relationship between value of products and employment, the direct wage earners displaced by the importations of strategic and critical minerals are as follows:

Direct wage earners in mines	57,200
Wage earners represented by materials used in mines	8,200
Total displaced direct wage earners	64,400

This direct displacement is 25 percent higher than the total industrial employment in the State of Oregon. The industries of Oregon, on the average, give employment to 52,200 wage earners and produce an annual pay roll of \$53,070,000

and products valued at \$265,437,000. This comparison points out the large possibilities inherent in the development of the latent resources of the Northwest.

INDIRECT PAY ROLL

For every person gainfully employed in mining or industry, there is, conservatively, at least two to three persons gainfully employed in agriculture, construction, finance, trade transportation, and some seven other lines of major employment activities. Direct employment in mine or factory induces employment in other lines. To show this relationship, I am presenting table 5.

TABLE 5.—*Distribution of United States employment*

	Equivalent full-time employment	Percent of total
Agriculture.....	9,925,000	24.0
Construction.....	719,000	1.7
Finance and government.....	3,128,000	7.5
Manufacturing.....	8,512,000	20.6
Mining (all mining).....	1,745,000	1.8
Railroad.....	1,614,000	2.4
Trade.....	6,572,000	15.9
Services.....	6,362,000	15.9
Utilities:		
Electric.....	424,000	.6
Electric railway, telephone, and telegraph.....	458,000	1.4
Other.....	1,379,000	3.3
Miscellaneous.....	2,030,000	4.9
Total.....	41,411,000	100.0

¹ This figure is slightly higher than that reported by the U. S. Department of Commerce in Industrial Market Data Handbook for 1935. This difference is due to including in the figure presented herewith average part-time employment.

² This figure checks substantially with U. S. Department of Commerce figures for 1935.

³ From 1935 report of Interstate Commerce Commission.

⁴ Estimated from data presented in Moody's Manual of Public Utilities.

Based on chart IV—Structure of American Economy, June 1939, N. R. C., p. 63.

This table presents the best guide as to the part played by each section of the over-all employment sources in the National Economy.

Ratio of employment in different sections per industrial employee:

Agriculture.....	1.16
Railroad.....	.12
Trade.....	.77
Services—Personal.....	.77
Sum of principal other employment sources.....	2.82
Ratio of industrial employment to all other employment sources.....	4.86

The modern key which can unlock the door leading to the storehouse of latent resources is electrometallurgical, electrochemical, and electrothermal processes. Cheap hydroelectric power is the Northwest's greatest resource. If wisely used, it will become a national, as well as a great local asset. Electric processes can make the opening of mines possible. Opening mines will furnish materials for basic industrial development. Basic industries which use large amounts of power induce secondary industries which are large users of manpower but smaller users of mechanical power. In addition to latent minerals the Northwest has vast forestry and agricultural resources. The same energy methods can be applied to forestry and agricultural wastes and products.

The lack of metallurgical coke has kept iron and steel industry from locating in the Northwest. Recent developed processes point out the way to manufacture synthetic coke from wood wastes. Any mining and industrial development requires collateral transportation, finance, construction, trade, and utility services, with attendant indirect employment. The starting point in this development lies in tying together the energy sources and the latent products of the ground. We need to open mines and establish basic industries, and use waste forest and agricultural products.

NITROGEN

During the last World War nitrogen and its compounds was number one on the list of strategic materials. Four years ago this element was transferred from the strategic list to the critical list. Last year it was removed from the critical list because of progress made in synthetic production from the air.

The nitrogen situation furnished an illuminating example in what can be accomplished by research and investigation, and points out a definite avenue of approach in our present situation. The largest uses of nitrogen are for explosives and fertilizer. Practically the entire supply of the world's mineral nitrogen was concentrated in Chili, under monopolistic control. Foreign ownership early realized the importance of control both of production and trade routes. German capital then owned one-third of these nitrogen ores.

Space does not permit repeating the history of the political and commercial struggle over this Chilean ore. The 1914 British-German naval battle off the Falkland Islands resulted from the tussle to control the nitrate trade routes. The removal of German shipping from the high seas and the German blockade was of important military advantage to the Allies, but led to the development of synthetic processes and the overthrow of Chilean supremacy in the nitrogen industry. These facts together with the long-distance transportation and requirements of large tonnage space for the world's requirements, placed the synthetic nitrogen industry on its feet. The large concentration of this natural mineral ore in a place far removed from the consumption centers, and the world's dependence on a single remote source, induced the chemical industry to get to work on processes and substitutes.

There is very little new under the sun. All we have to do to progress is to observe, work, and experiment. From the beginning of time nature has taken nitrogen from the air. Thunderstorms and lightning have fixed nitrogen in the form of nitrogen oxide, which reaches the soil, dissolved in rain. It has been estimated that each year, lightning fixes 100 million tons of atmospheric nitrogen, which Roush states is 50 times the amount annually produced by man. Eighty percent of nature's fixation is lost at sea and a large part of the remaining 20 percent falls on unproductive land. Only 2 to 9 pounds per acre annually reach tilled land, depending on the frequency of thunderstorms. When man's ingenuity went to work and imitated nature, or developed "byproduct processes" or produced artificial lightning under a control system of occurrence, the air and coal mines were opened for nitrogen production. This development has been rapid, and has progressed to such a point that 75 percent of the world's nitrogen requirements are now supplied from synthetic sources. The air's supply of nitrogen is unlimited.

Besides production from natural sources, there have been developed two principal synthetic sources—namely, byproducts from coke and atmospheric nitrogen. The development of "byproduct coke" ovens started in the depression of 1893, and by 1914 domestic "byproduct" nitrogen supplied one-quarter of our domestic requirements. Since the World War "byproduct" nitrogen production has increased rapidly. The amount of such "byproduct production" depends on our coke and steel requirements. The difference between our consumption and "byproduct production" can be supplied from atmospheric sources.

Three processes have been worked out for fixing atmospheric nitrogen. This conversion can be effected by the cyanamid process, the high-tension electric spark, or catalytic action at high temperatures and pressures in the formation of ammonia. As a war measure Congress authorized the construction of a 40,000 short-ton cyanamid plant at Muscle Shoals. This plant was completed after the armistice but has not been in operation except for test purposes. The largest cyanamid plant in existence is the 80,000-ton plant at Niagara Falls, Canada, just over our border. The first synthetic-ammonia plant was built in 1921. Nearly 90 percent of our synthetic ammonia capacity is found in two plants at Charleston, W. Va. and Hopewell, Va. Chemical research has solved the nitrogen problem, and assured our self-sufficiency in this material. This case is cited as an example we should follow.

THE REMOVAL OF OTHER MATERIAL DEFICIENCIES

Another of our World War shortages was potash, one of the three essential plant foods, and a requisite in the manufacture of a number of products including medicinal compounds, and black gunpowder. Extensive exploration has located an inexhaustible supply in New Mexico and California. In spite of our developed

potash independence we import 350,000 tons annually to supply a consumption of 620,000 tons.

The Bureau of Mines has recently developed a new process for the production of pure electrolytic manganese, which is number one on the current list of strategic metals. This process has been patented, and a use license was issued in 1938. A small manganese pilot plant is under construction in Knoxville, Tenn.

The Bureau of Mines and Washington State College have also recently developed a combined flotation and electric method for extracting magnesium metal from the lower-grade magnesite ores of the Pacific Northwest. In 1938 a method was found to protect lower-quality magnesium from corrosion. Another protective treatment has been developed through electrolysis. High strength magnesium alloys have been produced experimentally. The Northwest Magnesite Co. has completed the construction of a 5-ton experimental plant for the beneficiation of magnesite ores. This work opens an avenue for the utilization of cheap Bonneville power for the production of magnesium from magnesite. This is a field of major proportions, and one in which great advances will be made. Magnesium can be substituted for some of the deficient metals.

The United States chemical industry was greatly stimulated by the World War. As a result of the present war, chemical industrial activity is now expanding on a world-wide basis. Synthetics in many fields are replacing natural materials, as better results have been obtained from controlled and stable processes. The most spectacular of recent developments has come in the field of plastics. For years we have imported millions of dollars' worth of natural gums but this importation has dropped to small quantities. We are now able to manufacture high grade synthetic gums for fibers and lacquers from agricultural products. Rayon is replacing imported silk.

What we must now consider is the commercial effect of the German "Ersatz" progress. The soy and castor bean will become the raw material base for a developing plastic industry. Many natural articles now in consumer trade will be produced synthetically. We need to watch the growth of world markets for new kinds of merchandise, and the effect dispersion of political exiles from Europe, with their inventive aptitude and their skill in trading, will make on our industry and commerce. If we are to hold our place as a nation, we must go into and solve this problem in an effective way. World conditions will not permit half-way measures.

Minerals amount to about one-sixth of our total imports. Of this amount 38 percent are strategic minerals and 21 percent are critical minerals. In addition we import about \$119 million in rubber. It is therefore apparent that a few materials occupy an important, and seemingly an indispensable place, in our world-wide over-all strategy.

In citing the advances made in synthetic production I do not want to create the impression that we are making exceptional progress. Modern industrial development has created new requirements, especially in the field of alloy steels. With the advance in technology, new requirements have come up about as fast as we have solved our older problems. Most of our rubber and tin—totaling in annual imports, \$188,900,000, come from the Dutch East Indies and the Malay states. The present implications are that we may have to secure rubber and tin from other sources. To protect this source of supply would require us to expend a billion dollars per year for an augmented navy. Could we not declare our independence in tin and rubber, through technological synthetic developments? It could be done at a much lower price and keep us free from involvement in Old World affairs.

THE HANDICAP OF IMPORT RESTRICTION

How restrictions can be placed upon us by dependents on imports is exemplified by the case of aluminum ore—bauxite. In the early days of the aluminum industry, domestic metal requirements were derived from domestic ores. In the interim use of aluminum expanded sevenfold, and this industry had to seek foreign ore sources. Today one-half of our ore requirements are imported—almost entirely from British Guiana. After American exploitation in this country, a British ruling was issued limiting the use of ore on crown lands in any British territory to British capital. However, a concession was granted in the case of Guiana, provided the ore was reduced in British territory. This ruling resulted in the establishment of the large American-owned plants at Arvida and Shawinigan Falls, Quebec. We must realize that importations can impose political and commercial control by outsiders, adversely affecting our defense, employment, and commercial situation.

Bauxite deposits in the United States are small but large reserves of the submarginal ores, leucite and alunite, exist in Utah, Colorado, Wyoming, Oregon, and Washington. Further developments in technology is needed for the commercial development of these submarginal ores. Occurrences of bauxite in Oregon have been reported, but further detailed surveys are needed to determine the quality and extent of these Oregon deposits.

The same situation existed as to nickel. After the "Deutschland" incident in 1915, Canada required smelting within her borders, resulting in the closing of our New Jersey nickel smelters.

MINERAL RESOURCES OF NORTHWEST

Forty-one mineral occurrences have been charted in the Pacific Northwest. This number includes 31 industrial metals, 9 of the 11 strategic metals, and 14 of the 24 critical metals. The extent and quality of all these occurrences has not been fully determined. Low-priced power for modern processes is available, and all that is needed to utilize these resources, is an accurate inventory of quantity and quality of minerals and practical processes for beneficiation of the determined quality of the ores.

Under the Thomas Act, the United States Geological Survey and the Bureau of Mines are authorized to make the necessary surveys and investigations. With the cooperation of the State mining bureaus these two Federal agencies can make a wider coverage with the given appropriations. We have heard a great deal about these occurrences. Our first step is to determine really what we have of commercial value and then concentrate on the utilization of these determined values.

The region is short of fuels and metallurgical coal. This fact has hampered past industrial development. Low-priced hydro power is more than a substitute for these fuels. Such power is the most modern tool in the industrial kit.

Over-all we have sufficient information to conclude that a substantial part of these minerals are of low grade and occur in complex ores. The treatment of such ores cannot be accomplished by established standard processes, successfully used in the East under different conditions. We need to follow up such an inventory with investigation and experiment. We need also to develop new processes in pilot plants, and to fairly protect utilization against the "side tracking" control of monopolies. Briefly this is the formula which will tie together the power and mineral resources of the region into a great national asset. Again I must state that there is nothing new in this formula. It is the one used in Scandinavia, where natural endowments are similar to those of the Pacific Northwest. It was the cheap and abundant hydro power of Niagara, through electric processes, that made the automotive industry of Detroit possible.

THE SOLUTION

In an emergency, the lack of strategic and critical material sources will become a great national handicap. To solve this problem we cannot afford to wait until the arrival of such an emergency. Our industrial system cannot change its operations overnight. Any adjustments must be gradual, and developed under normal conditions.

Aside from being a defense question, it is one of great commercial, economic, and social proportions. A partial solution of the unemployment problem is wrapped up in this matter, and it has a sufficient pressing demand to warrant further consideration by Congress. This problem is susceptible of a number of solutions, which I am collecting and restating. The solution to adopt will depend on the material. Most likely we will find that the most advantageous program will be combination of several or more solutions. These are:

- (1) Make it possible for the Geological Survey and the Bureau of Mines, with the cooperation of State agencies, to accumulate all available information on metal deposits.
- (2) Expand surveys and samplings of reported occurrences accurately to determine extent and commercial quality of deposits.
- (3) Advance processes or develop new methods for processing medium and lower grade ores, through research, experiment, and the construction of pilot plants.
- (4) Increase domestic peacetime production.
- (5) Adopt conservation measures for those materials where domestic reserves are definitely known to be limited.
- (6) Expand recovery of secondary metals; scrap.
- (7) Develop both general and limited substitutes.

(8) Build up reserve stocks, by use in other commercial channels, which can be converted to basic metals if necessary.

(9) Establish stock piles. Stocking is needed to protect immediately against the consequences of a long-delayed plan or adjustment of industry to new processes. At best stock piles is a short-time expedient. On a long-time basis it should not be attempted until possibilities of other solutions have been exhausted.

(10) Establish research in the collateral fields of prices, markets, cost of development, cost of operation of commercially feasible or undeveloped sources, and the accessibility and cost of transportation.

EXHIBIT 6.—THE TVA AND UNEMPLOYMENT

The TVA is helping open up opportunities for national business and is helping solve the unemployment problem.

DISTRIBUTION OF PURCHASES

More than two-thirds of the purchases made by the Authority for its construction program and other activities have come from firms located outside the South.

This is because the South has been traditionally a raw materials area producing comparatively few of the manufactured products it uses.

Total purchases of the Authority in fiscal year 1939 amounted to \$18,163,566. Certain States got large shares of these expenditures, for example:¹

Illinois	\$890,327	New York	\$1,974,801
Indiana	280,067	Ohio	871,169
Massachusetts	514,806	Pennsylvania	3,344,009
Michigan	223,045	Wisconsin	1,725,888
Missouri	383,372		

The importance of the TVA project in helping keep factories running in other areas as well as in the South is indicated by the above figures. These figures are for 1 year only; total purchases by the Authority since it started to June 30, 1939, have amounted to over \$100,000,000. Purchases have been made in 47 States.

ELECTRICAL APPLIANCE SALES

The coming of TVA power has made the people of the Tennessee Valley electrically minded. Many are getting power for the first time. Those who have been using electricity are finding that the lower TVA rates now make it economically feasible to purchase types of equipment that use considerable power, such as electric ranges and water heaters. As a result the area getting TVA power has been outstanding as a market for electrical appliances. The rate of sales of appliances in the area getting TVA power has been much greater than in the rest of the country, \$53 per customer as compared with the national average of \$12 in 1938, (latest published figures based on reports of 129 utility companies and the dealers in their territories).

Approximately 500 independent dealers providing monthly sales reports to the Authority showed total sales during fiscal year 1939 of \$3,688,000 worth of electric appliances, including 8,680 electric refrigerators, 4,288 electric ranges, 1,547 electric water heaters, and 4,949 electric washers. A total of 48,350 miscellaneous appliances was also sold.

These figures are for the year ending June 30, 1939, which is prior to the purchase of the facilities of the Tennessee Electric Power Co. and portions of those of the Mississippi Power Co. and a resulting large increase in the number of users of TVA power. They do not reflect the full effect of TVA rates, which will not be evident in appliance sales until another year. The number of users of TVA power increased from 187,000 to 360,000 with the acquisition of Commonwealth & Southern properties.

When a community gets TVA power, sales of electrical appliances increase rapidly. As an example, Knoxville and Knox County sales of electric appliances increased over \$600,000 or 41 percent in the 12 months of 1939, as compared with the same period in 1938, most of which was before Knoxville had TVA power. Increase in sales of appliance units in 1939 included an increase of 40 percent in

¹ These figures are not complete since they cover only purchases made directly in these States. In addition, there are purchases made from jobbers' stocks or otherwise in Tennessee and other Valley States, which actually are manufactured in some of the States listed.

For example, most of \$1,000,000 worth of electrical apparatus, motors, generators, etc., reported as purchased in Tennessee, while bought from sales agencies in Tennessee, was actually manufactured in other States.

refrigerator sales; 40 percent increase in ranges; 118 percent increase in water heaters; and 300 percent increase in electric pumps.

Listing electric appliance sales does not tell the whole story of the benefits to national business resulting from lower power rates. Every new water pump installed means sales of piping and plumbing supplies; every range of heavy farm motor means additional sales of wiring and insulating materials.

Nor does listing appliance sales in the Tennessee Valley tell the whole story of the effect of lower TVA rates. This effect has spread throughout the Southeast, where private companies instituted rate reductions to some extent following publication of TVA rates. The striking figures below show residential appliance sales before and after initial rate reductions following TVA organization. Both years shown were depression years.

Company unit sales	Georgia Power Co.	Alabama Power Co.	Tennessee Electric Power Co.
Refrigerators:			
1933	3,619	2,385	1,600
1934	10,428	4,254	7,832
Ranges:			
1933	652	318	1,070
1934	3,577	1,269	3,810
Water heaters:			
1933	117	86	394
1934	1,896	629	1,762

Above data include only merchandise sold by companies.

As a result of lower rates, total appliance sales in the Southeast have mounted to a considerable figure, making this area outstanding as a market for electrical applicances. In 1938 sales were as follows in the Southeast:

	Units
Ranges	32,340
Refrigerators	94,715
Water Heaters	13,050

One can visualize these units coming off production lines paid for by Tennessee Valley and Southeastern communities but making work and pay rolls for other areas. For the Southeast makes hardly any of the electrical equipment it uses. Total value of "electrical machinery, apparatus, and supplies" produced in the United States in 1937 was \$1,600,000,000. Ninety-nine percent of these products were made outside the Southeast, particularly in Ohio, Pennsylvania, New York, Illinois, Massachusetts, and New Jersey, which are the leading States in the production of this class of manufacturers.

TECHNICAL RESEARCH AS A BASIS FOR BUSINESS DEVELOPMENT

One of the Authority's activities is a program of research and demonstration relating to the resources of the area and the development of equipment for soil conservation. This program is carried on in cooperation with State agencies in the research and demonstration stages and with private business when a development is ready for the stage of manufacture and use. Some examples follow:

Cottonseed processing industry.—Three important manufacturers of oil seeds processing machinery are now making under license agreements certain equipment which the Authority helped develop in cooperation with the University of Tennessee Engineering Experiment Station.

The average businessman has a hard-boiled attitude when it comes to research. Developments carried only through the laboratory stage do not convince him and bulletins in technical language do not appeal to him. He needs to be shown. So the Authority helped the University of Tennessee operate a pilot plant with full-size pressroom equipment to demonstrate on a commercial scale an improved type of equipment for cooking cottonseed prior to extracting oil from it. Cottonseed mill superintendents could bring their seed to this plant for processing and compare results with those obtained in their own plants.

Results which they could see convinced them that they could get approximately 3 percent more oil (10 pounds more per ton of seed) in addition to other advantages. The equipment might pay for itself in 1 year. As some 400 mills in the South crush about 4,000,000 tons of cottonseed annually, savings to the industry would amount to several million dollars each year if all mills adopt the cooker.

But before this cooker could be made available to the industry, further pioneer efforts were needed in connection with arrangements and other steps to get it into widespread use.

Since research organizations are not always best fitted to exploit the results of their work, both institutions looked to the University of Tennessee Research Corporation to administer patent rights and get the results into use. Practical businessmen are on the board of this nonprofit corporation in addition to members of the university itself. Through this organization negotiations with private business are undertaken.

As a result, three major companies in this field, two in Ohio and one in Georgia, are now manufacturing and installing cottonseed cookers of this new type. Seven mills to date are using the cooker. As a further result the cottonseed-crushing industry is now ready to look to technical research for assistance instead of depending on rule-of-thumb methods. The industry is helping support the program of the engineering experiment station, and projects are chosen which the industry wants. It has already contributed substantially by furnishing cottonseed and equipment.

Furrow seeder manufacture.—Another example is a furrow seeder. This low-cost machine was developed by the Authority for use on small farms in planting fall grains in contour furrows in hillside lespedeza sod to provide a winter crop to hold the soil from washing in winter rains. The furrow seeder was successfully demonstrated through the extension services in some 40 counties in the Valley before more than 1,000 farmers, some 200 of whom showed their interest in the seeder by using it to plant 1,500 acres in fall grain on their own farms as a part of the demonstration.

The furrow seeder, and the testimony of farmers who had actually tried it out, were called to the attention of farm-machinery manufacturers. One of these concerns located in Kentucky became interested and is now manufacturing and marketing the seeder. Sales have been made by this company to farmers in Kentucky, Tennessee, Virginia, Oklahoma, Indiana, and other States.

Hay drier.—How developments intended to solve special problems of the Tennessee Valley area may result in widespread use and opportunities for national business is illustrated by TVA work on a low-cost barn hay drier. Hay-growing conditions are good but curing conditions are bad in the Tennessee Valley, which is an area usually subject to heavy and frequent rains. Steps are being taken in this area to encourage the growing of more legume and other grass crops to control erosion. Many of these crops take a long time to cure and if rain falls on them are subject to substantial loss in value. To solve this problem the Authority in cooperation with local agencies has developed and demonstrated a practical hay-drying system consisting of air ducts, a blower, and electric motor costing about \$300. Representatives of northern manufacturers of blower fans have shown interest and cooperated in this development.

Although this equipment was designed to solve what was thought to be a special Tennessee Valley problem, interest in this hay drier has been widespread, with inquiries being received from farmers and organizations in 37 States. Although experimental work is still incomplete, private installations have already been made, not only in the Tennessee Valley, but also on farms in Ohio and Rhode Island indicating the beginning of national use. Both farmers and business will benefit from this development.

Refining of kaolin.—American manufacturers of chinaware have long used kaolin imported from England as one of their essential raw materials. Refining methods developed by TVA research now make it possible for American kaolin to be used in greater quantities by American manufacturers. The Authority installed a ceramic laboratory at Norris to test clay from widespread deposits of this mineral in the Tennessee Valley. These tests have proved that when properly mixed and refined, these clay deposits constitute a dependable source of kaolin for the production of high-grade porcelain and whiteware on a large scale. A pilot plant was set up and operated to work out processes for mixing and refining clay bodies composed wholly of American materials.

Though these kaolin deposits have been known since colonial days and have been worked off and on for the past 50 years, the quality of the output varied so much and the supply seemed so limited, that it was used mainly for making low-grade heavy whiteware. Probably the outstanding achievement of the ceramic laboratory was the exhaustive series of tests which fully demonstrated that this same kaolin, properly blended and refined, yielded clay bodies of constant characteristics, from which high-grade porcelain, equal to that now being made from costly imported clays, could be manufactured.

As a direct result of these experiments, during the last 2 years, several ceramic plants have been gradually changing over from English to American kaolins. The war in Europe has greatly accelerated this shift. Last year 16,000 tons of refined kaolin were produced near Spruce Pine. This constituted about 40 percent of the total domestic production of kaolin for whiteware. The present prospects are that production this year will be more than doubled. There is every indication that this business will be retained after the war and that American production will grow.

The United States Bureau of Mines has leased the Norris ceramic laboratory to establish an electrochemical station. In cooperation with the Authority, the Bureau is continuing experiments started by TVA on electric firing of ceramic ware, and tests on resistors for electric kilns.

This is another example of how research on Tennessee Valley raw materials and resources can benefit other areas which can use these resources.

New markets for national products.—The added income from new industrial production built up by research in regions such as the Tennessee Valley will create new purchasing power for the goods of other regions.

In this connection, the importance of the present low-income situation cannot be overestimated. Information obtained from over 6,000 farm families in the Tennessee Valley between 1933 and 1936 showed medium net cash family incomes from of \$100 to \$318 per year. As another example, the average expendable income per capita in 1935 of the 10 Southern States, according to the best available data,¹ was \$279, as against the national average of \$513.

Unavoidably such income levels make it almost impossible for the great majority of farmers to follow improved farm-management practices, which involve investments for terracing, legume seed, fertilizer, and new farm implements. Nor can they take their places in the army of consumers of those American products which are marketed on a national scale.

If these low levels of income can be raised, a broad base will be laid for expanded markets for manufactured goods, many of which will necessarily come from national sources. A new buying group will be brought into the national market.

There are 24,000,000 people in the 10 Southern States. If their per capita income were to be raised to the national average new billions of dollars of wealth and purchasing power would be created. The TVA is pioneering in steps leading toward the goal of higher regional income.

TVA INCREASES COAL SALES

The Authority's research on phosphoric acid manufactured by the electric-furnace method as well as the availability of low-cost power for such operations has resulted in a number of companies starting or expanding commercial phosphoric acid manufacture in the Tennessee Valley region. Coal is a raw material for this process. The coal consumption of the plants and equipment now in use and contemplated for immediate construction, including TVA operations, is estimated to require more than 277,000 tons of coal per year. In addition, electrodes are needed for electric-furnace operations, and a large company has started an electrode plant in the area. It is reported this plant will require 100 carloads of coke each month, the equivalent of 40,000 tons of coal annually. The above are all new markets for coal which did not exist before.

The low rate-of-consumption policy that the Tennessee Valley Authority introduced in 1933 has so spurred the demand for electricity that in each of the last 4 years the electric utility plants in Alabama, Tennessee, Georgia, and Mississippi have burned more coal than they did in the predepression boom year of 1929. The demand for electricity in this area has increased by leaps and bounds and the demand for coal in electric plants has grown with it.

Where only 334,000 tons were used in 1929, utility plants in the TVA area consumed 357,000 tons in 1936, 695,000 tons in 1937, 677,000 tons in 1938, and 545,000 tons in the first 10 months of 1939 with 2 of the greatest coal-consuming months still to go.

The last figures available show that electric plant coal consumption in Alabama, Tennessee, Georgia, and Mississippi for the 12 months ending October 31, 1939, was 755,000 tons, or 125 percent more than the same area used in 1929.

The Tennessee Valley Authority itself, between the month of August, when it took over the generating plants of the Tennessee Electric Power Co., and the end of the year 1939, purchased 190,000 tons of coal, more than half as much as was

¹ Sales Management, no. 1, 1938, is available from the Bureau of the Budget, Washington, D. C.

consumed by the entire four-State area in the predepression peak year for power production.

In brief, 6 years after the establishment of the Authority, the coal industry is selling annually more than twice as much coal for use in electric generating plants as it did before. The contrasts between this fact and erroneous statements and predictions is striking.

TVA FERTILIZER RESEARCH

The TVA's experiments in the manufacture of phosphate fertilizers and its demonstrations in cooperation with other agricultural agencies have contributed to the development of potential markets for such products. The new uses are in the growing of cover crops to prevent soil erosion and on pastures for livestock. Most commercial fertilizer in the past has been used on cash raw crops.

Evidence is accumulating showing results of the educational program.

By the fall of 1937 it was evident the demand for new concentrations of phosphate would far exceed the capacity of the Authority's experimental plant. An Authority representative was authorized to work with the A. A. A. toward securing the higher concentrated forms from commercial manufacturers. Under this new agreement 30,729 tons were supplied by private industry in 1938 and 81,956 tons in 1939.

Still further evidence of the final step in the operation of this educational program is furnished from a survey conducted by the Alabama Extension Service. Their study was of 20 typical counties scattered through central and southern Alabama. In 10 of these counties selected farmers were conducting test-demonstrations of TVA phosphates as outlined in the first part of this statement. These counties were compared with 10 adjoining counties in which such demonstrations had not been undertaken. During the years 1937 and 1938, counties in which demonstrations with TVA phosphates were conducted used 11,034 tons of phosphate on pastures, while the 10 counties in which there were no demonstrations with TVA phosphates, but which were otherwise comparable, used only 1,008 tons of phosphate on pastures.

It is also of interest to note that of the 11,034 tons used in demonstration counties, 1,094 tons were TVA phosphate for demonstration purposes, and 869 tons were supplied by the Authority through the Agricultural Adjustment Administration. The remaining 9,071 tons were supplied by the fertilizer industry. In the 10 nondemonstration counties where no TVA phosphate was furnished for demonstrations only 178 tons of phosphate were supplied by the Authority through the A. A. A., leaving 830 tons supplied by the fertilizer industry.

These results would seem to indicate that test-demonstrations with TVA phosphates have increased both the total quantity of phosphates used on pastures and the total amount of phosphates supplied by the fertilizer industry for this purpose.

TVA HELP TO THE RECREATION INDUSTRY

Byproducts of the Authority's river development work are the recreation activities on the new lakes behind TVA dams.

An analysis of the Norris Lake boating statistics reveals that there are economic values in the Norris project associated with recreation. As of June 30, 1939, there were 1,800 boats on the lake. These boats had a value in excess of \$339,000. Certainly this creates a favorable impact upon the boat-building trade. The impact, however, is largely national, for the 500 larger and more expensive craft, worth more than \$185,000, were built and shipped in by the large boat manufacturers. Outboard motors, too, are largely imported into the area. The 1,140 in use are worth \$80,000. The less expensive small boats are being built locally in large numbers. Though valued at but \$73,000, there are 1,300 locally built boats on the lake. In addition to boat sales there have developed new markets for fishing tackle and other sporting goods.

ASSISTANCE TO NAVIGATION ON MISSISSIPPI RIVER SYSTEM

The TVA system of dams, although still incomplete, has already contributed toward lowering flood crests on the Ohio and lower Mississippi.

These dams have more recently furnished substantial assistance to navigation on the lower Mississippi during a period of drought.

Releases of water from the Tennessee Valley Authority's Norris Reservoir throughout the critical dry fall period of 1939 were sufficient to add six-tenths of a foot to the flow of the Mississippi River at Memphis, or seven-tenths at Cairo. To operators of navigation, faced with what would have been the lowest

river level at Memphis in 40 years, this increase of the river stage by more than half a foot helped in the meeting of freight schedules and maintained a continued movement of large tonnages which otherwise would have been held up at shipping points.

During the months of October, November, and December, the West Kentucky Coal Co. maintained a schedule of tows consisting of approximately 3,000 tons between Cairo and Memphis with their towboat *Marcia Richardson*. "If the draft of water had been 1 foot less," said the manager of this company's river transportation, "we would have handled approximately 500 tons less per trip. We handled about two trips per month, and, we, therefore, would have handled 1,000 tons per month less. If the draft had been 1 foot more, we very likely would have handled approximately 1,000 tons more with this beat per month."

Difficulties in Mississippi River navigation below Cairo begin where the stage drops below 10 feet. When the river reaches its lowest levels, which usually occur during the months of September and October, navigators say that an increase in depth of even as little as three-tenths of a foot is of distinct value.

"We usually move a four-barge tow north and the reduction of 1 foot in this draft curtails our north-bound tonnage in the amount of some thousand or two on the four barges," reports Mr. Theodore G. Preston, of Commercial Solvents Corporation, New Orleans. "Had we had during these last 3 months of low water, an additional foot of water in the river, we could have moved approximately some 6,000 additional tons north to Peoria from New Orleans."

The Tennessee Valley Authority projects, including Kentucky and Watts Bar Dams now under construction, will increase the contribution of the Tennessee River to the Ohio and Mississippi Rivers during period of low flow from approximately 5,000 to 15,000 cubic feet per second. This additional 10,000 cubic feet of water per second will increase navigable depths in the lower Mississippi River by 1 foot or more in critical periods.

TVA ASSISTANCE TO THE RAILROADS OF THE UNITED STATES

Among the businesses that have benefited by the program of the Tennessee Valley Authority are the railroads of the United States.

Beginning operations in 1933 when railroad earnings were at a low ebb, the Authority has made valuable contributions to rail traffic during a period when the railroads were badly in need of business.

The rail traffic produced because of activities of the Authority consists of: (a) Traffic moved for the use of the Authority in carrying out its program, and (b) traffic accompanying the stimulation of economic activity engendered by the TVA.

Materials received by rail by the Authority between 1933, the year of its inception, and October 1939, for carrying on its threefold program of flood control, navigation, and power production reached an aggregate of 57,076 freight carloads. Total payments by TVA to the railroads for the service of moving these many thousands of cars was approximately \$7,000,000 between 1933 and June 1939.

In addition to receiving traffic, TVA has shipped out-bound, through October 1939, 10,648 carloads of freight by rail. Of this, 9,067 cars consisted of fertilizers and fertilizer materials, mostly concentrated phosphatic fertilizers that were shipped to every State except North Dakota and Oregon and produced revenue to the railroads of about \$900,000. The remainder of this out-bound freight consisted mainly of electrical supplies and miscellaneous equipment shipped between various projects of the Authority.

The Tennessee Valley Authority has, as recounted above, been directly responsible for moving about 70,000 carloads of freight over American railroads. The traffic indirectly generated because of the TVA program is not susceptible to direct enumeration as is the Authority's own movement, but is even more important in that it will mean permanent traffic based on general economic activity resulting from the Authority's activities.

and atomic energy will not be passed until every Canadian has a home and a job, and that the Canadian government has a responsibility to maintain and expand its industrial base and to maintain a balance between the public and private sectors of the economy.

REPORT OF THE COMMITTEE ON PUBLIC WORKS AND UNEMPLOYMENT

We have heard reports on studies of the factual situation on many of the causes of unemployment in industry. We have heard theories as to broad remedies designed to correct or remove some of these causes.

Some one or many of them if adopted, may remove a great part of our problems. We must realize, however, that the problem exists today, and probably will be with us in greater or less degree for some time to come. Estimates of unemployment available for February 1940 range from 9,436,000 of the National Industrial Conference Board, to 11,880,000 by the C. I. O.

All sources agree that there has been some increase in unemployment since the February figures. Estimates for the immediate future vary, with some hope for improvement, some fear of further slowing down of industry, no apparent well-founded expectation of any great change.

Industrial production since August 1939, adjusted to seasonal variation is reported to be as follows (1923-25=100):

1939:	1940:		
August	103	January	119
November	124	February	109
December	128	March	108

We are faced then with, as has been demonstrated in other reports to this committee, a fairly stable farm population over the last 30 years caused by the movement of the surplus to the industrial centers, an industrial employment far above 30 years ago and far above the low point of the depression, but still below the peaks of 1929 and 1937. The total population has steadily increased and because of the movement from the farms of the recurring surplus in farm population combined with the proportionately greater increase in the population of working age, as compared with the general population increase, the problem of urban industrial employment has become and remained our most pressing problem.

The potential capacity per worker of our farms and factories has increased greatly over the period of the last 30 years by reason of our technological advances.

Our people will never be reconciled to our admitting that the problem of unemployment cannot be solved. Neither will temporary solution by expansion of war industries be acceptable. Moreover, until we have solved this paramount problem, we must provide for those who are unable to obtain employment in private industry. This must be one of the most important functions of our public-works program.

All employment by expenditure of public funds provides some direct employment of those unable to find employment in private industry. The various forms of publicly financed works programs also provide differing amounts of private employment for each dollar expended.

This stimulation of private employment comes not only in employment in the industries fabricating materials to be used in the public-works program, but also in employment in consumer-goods industries to produce articles consumed by those whose wages are paid directly from the public expenditures. As in the case of the low-income group among the farmers, all the cash income of this group finds its way directly into the channels of trade.

Your subcommittee has discussed the problem with representatives of the W. P. A., P. W. A., and Bureau of Public Roads, and has gathered some data on other forms of public works such as housing and flood control. We would like to call to your attention at this time a few outstanding facts.

The current year's average monthly employment on W. P. A. has been 2,000,000 men and women.

Employment on W. P. A. at the beginning of March was 2,326,000.

On the basis of funds now available it will drop by June 1 to 1,500,000—a decrease of 825,000.

An appropriation for the full fiscal year 1941 of \$1,000,000,000 would mean an average monthly employment of less than 1,350,000 persons.

About 75 percent of W. P. A. is construction work, and 25 percent so-called white-collar. Sixteen percent of all project workers are women. Older workers probably permanently out of industry under present policies form a large part of W. P. A. workers. Average age is about 40. Average W. P. A. expenditure per worker is about \$62 per month, of which \$54.25 is wages, \$5.75 materials, and \$2 administration.

About 25 percent of project cost is borne by local community. There is relatively little indirect employment provided by W. P. A. except such as may be provided by consumption of goods by W. P. A. wage-earners.

P. W. A. construction is rapidly drawing to a close. On-site man-hours have fallen from a peak of over 60,000,000 in 1934 to well below 20,000,000; off-site, which is higher in this type of expenditure than in W. P. A., from over 100,000,000 to less than 40,000,000—the total from 150,000,000 to less than 50,000,000.

These projects, which will soon be finished, were financed largely by 45 percent grant plus 55 percent local or loaned funds.

Suitable projects are available for a P. W. A. non-Federal construction program ranging from three hundred to five hundred millions, and a P. W. A. Federal construction program of one hundred to two hundred millions. W. P. A. projects can be instituted within a relatively short time after funds become available—usually 90 days. P. W. A. projects take a much longer time to show a major effect on employment.

Sufficient local funds appear to be available under the present system for considerable expansion of W. P. A. employment—perhaps up to 3,000,000 persons—beyond which the 25 percent local contribution will present a serious local problem. Slum-clearance applications are available to more than fill the proposed increase of \$800,000,000 in housing funds. This program has a result on employment comparable to P. W. A. program expenditures.

In the public-roads program there has developed a lag of about 1 year in taking up existing Federal funds, due to slowness in matching by the States.

The man-year cost of Federal expenditures on W. P. A. is \$744. The comparable man-year cost of labor on the site of the public-roads program runs from \$2,000 to \$3,000. The P. W. A. man-year on-site cost varies greatly with the individual project. We may safely estimate it as at least equal to that on the public-roads program. Even though off-site man hours may exceed 15 percent of the on-site employment in this type of program, it is obvious that number of men employed per dollar appropriated is higher in the W. P. A. type of program.

Because of this fact, together with the fact that W. P. A. funds are made available for the purchase of consumers goods more quickly and to a greater proportion than funds spent on the other programs, your committee feels that the immediate problem can best be met by provision of sufficient funds for an average employment of 3,000,000 on W. P. A. in the coming year. This will entail an expenditure of \$2,232,000,000.

It will employ the employables who are now out of private employment and who meet the need requirements of the present W. P. A. program. It will leave to the States and localities the present problem of the care of those in need who are unemployable, and who are outside of the present social-security program.

The permanent benefits from work of the W. P. A. type are generally, of course, less than those from some other types of public works.

Others have from time to time indicated the need of programs for flood control, slum clearance, river and harbor improvement, river development, public buildings, public roads, and other desirable public construction. We should develop and correlate a long-term public-works program, so that work of this type may be accelerated in times of great unemployment and slowed down when the employment situation is more favorable.

It is obvious that action either upon the tax structure of the Federal Government or the existing debt limit will be necessary to provide W. P. A. funds in the amount recommended. Some such action should be taken in order also to provide funds for military expenditures in excess of the present budget, in addition to those required for work relief.

The military expenditures may temporarily ease the relief burden to some extent, but their nature is such that they should not be considered a solution of our problem.

Work relief and public works make a socially desirable use of our unemployed. They help to stimulate to some extent industry and agriculture. They help us meet other social needs such as slum clearance, river work, and highway work.

They cannot be said to remove the cause of the economic dislocation which brings about unemployment in industry to the extent to which it exists today.

A permanent committee of the House of Representatives should be formed to give continuing study to the causes of unemployment and to study proposed remedies, as well as the correlation of existing Government programs which have substantial effect on employment.

Additional direct appropriations for this may well be limited to those recommended for the W. P. A. program. Additional funds should be made available through the U. S. H. A. for the slum clear-

ance program which is more than ready to use the suggested \$800,000,000 increase at once.

The Public Roads Bureau reports that an express highway from Boston to Richmond can be undertaken at this time on a self-liquidating basis. This may well be undertaken at this time of continuing unemployment.

These are but two of many proposals which should be considered by such a committee as has been proposed.

In conclusion, we recommend a public works program tailored to the national employment situation, a W. P. A. program sufficient to provide for the employables in need, and a permanent committee of the House to give continuing study to this most important problem of employment of our people.

WHAT SHOULD BE DONE NOW!

This country needs jobs. More jobs would mean more income, better living conditions, increased national well-being and security. In these days of international conflict one of the basic elements of defense is a well-developed economic system. This is possible only if the manpower of the country is at work, producing the things we need.

We need more jobs. Yet the figures show that the number of regular public and private jobs last year was about 3,000,000 less than 10 years earlier. This point needs emphasis. In 1939 there were about 3,000,000 fewer people at work than in 1929.

To be precise the figures show 47,000,000 at work in 1929 compared with 44,000,000 in 1939. Yet we produced as much—in terms of goods and services—as was produced in 1929. Because of technology we produced as much with 7 percent fewer people employed.

Although 3,000,000 fewer people were employed, some 6,000,000 more people wanted jobs than in 1929. These 6,000,000 represent the net increase in the population not working or looking for work. This means 600,000 a year. By the end of 1940 we will have 600,000 more people in the working ages than we had on January 1 this year. And each year we will add still another 600,000. To keep these people from joining the hopeless millions of unemployed, industry must increase its employment 600,000 each year.

What is the record? Instead of increasing jobs by 6,000,000 during the 1930's, industry ended the decade 3,000,000 jobs below the 1929 level.

The increase in the labor force and the displacement of workers by improved production techniques account for our huge unemployment problem. This varies from 9.3 million to over 11,000,000, depending upon the estimate you take. The important thing is that no responsible person denies that the problem exists. Business statisticians put the figure at 9.3 million; labor statisticians at ten or eleven million.

This is the backdrop. These are the facts. Now let's come to the questions: What are we doing about the problem? What ought we to do?

The biggest unemployment program is the W. P. A. About 1,950,000 workers are employed on this program—about 1 out of every 5 of the Nation's unemployed. These people are destitute; local relief agencies have certified that they are in need. Another 1,200,000 workers are eligible for W. P. A. work, but no funds are available to

give them jobs. This means 1,200,000 workers, mostly heads of families. Including their dependents this is about 5,000,000 people in need. Yet W. P. A. doesn't have the money to get them on projects.

When we add the number on W. P. A. to the 1,200,000 who urgently need W. P. A. jobs, the total is 3,150,000. This is what W. P. A. employment ought to be right now. The W. P. A. has never given enough jobs to the unemployed in this country. Over the last 4 years W. P. A. has given jobs to only 25 percent of the unemployed.

What should we do? First, we should accept as a basic principle the proposition that every American family has a right to a job. Secondly, we should say that if private industry cannot provide sufficient jobs, then the Government must.

This, certainly, is no extravagant position. We have always held that work and opportunity are the bases of American democracy and well-being.

In recent years we merely failed to continue the tradition. The decade 1930 is the first on record in which the number of jobs for American workman declined. In all other periods employment increased as new industries were developed and new areas opened up. The severe depressions of earlier periods—the 1870's and the 1890's—were only temporary set-backs. But we are now confronted with a different situation. Job opportunities are not automatically increasing—they are decreasing, while the number of people who need jobs is increasing.

Our national policy, therefore, should see to it that no American family is without a job. How close do we come to this now? We have about 4,500,000 families in this country without regular public or private jobs. These families include only those with one or more employable members. Almost 2,000,000 of these have W. P. A. jobs. Another 900,000 are receiving unemployment compensation; and several hundred thousand are employed on other Federal work projects. About 1,000,000 families are wholly unemployed and are urgently in need.

If we increase the W. P. A. program to 3,000,000 we will be satisfying the minimum social and economic requirements. This is not a complete answer. Many others undoubtedly would still be in need; but this basic idea would provide a rational basis for congressional action.

What would this cost? On its present basis, W. P. A. spends \$744 a year per man on wages and materials. On this basis, 3,000,000 workers on the program would cost \$2,232,000,000 a year. In addition to this, sponsors would be required to provide some \$750,000,000 because of the 25 percent sponsor contribution.

This sponsor contribution should be modified; if it remains a fixed percentage the figure ought to be 10 or 15 percent. This, of course, would increase the Federal share for expenditure on materials and equipment. A Federal appropriation of \$2,500,000,000 would do the job. This would cost approximately \$830 a year from Federal funds.

This cost compares with \$2,000-\$3,000 for the Public Roads Administration and about \$4,000 a year for P. W. A.

The W. P. A. program is the only type that can provide jobs to millions of workers. It puts money into the hands of consumers as

quickly as possible. It is a flexible program which meets the needs of the unemployed more effectively than any other type of work program.

This does not mean that these other programs ought to be neglected. Decidedly not. But it is clear that work for millions of unemployed—

for the 3,000,000 men who need it now—can only be provided by the W. P. A.

HOUSING PROGRAM FOR THE UNEMPLOYED

By John G. Voorhis

The three essential and material needs which an unemployed man must fill, if he is to live, are shelter, food, clothing. The question thus becomes: How can we most economically and effectively provide for same? If, as is the case, many millions of our workers are permanently displaced from regular employment, why not subsidize them with a modern home and a garden which would permanently provide for two of the three acute needs, then eliminating that proportion of our relief burden? It is very likely that the balance of the problem would be eliminated, by the mere process of providing for a home and garden, and by the consequent reduction in relief expenditures and by the improved business and public morale which would result both from the program and from the fact that we had stemmed the tide of growing unemployment.

Let us retain the present unemployment program as to the temporary situation and as to those unable to provide food for themselves and families because of their physical handicaps, but for the many millions of able-bodied breadwinners who would be glad of an opportunity to recoup their economic fortunes, by some assistance from those of us who still have jobs or a business, let us provide shelter and a means whereby they may provide food for their families. We have subsidized everything and everybody else in this country and made a success of it, we even made a lot of good citizens and happy families by homestead grants of 160 acres in pioneer days. Let us do some more timely subsidizing and pioneering.

In my estimation the present housing agencies could be expanded in the various States so as to provide funds for as many unemployed and penniless applicants among that group as feel they would like to build themselves a suburban home and garden. The plan is especially desirable for our large cities. Let us buy up as much land in suburban areas as we need and as we can get at reasonable prices, divide the areas into attractively landscaped and paved country club residential districts and allot a plot to each applicant with a grant of sufficient funds to provide the residence, necessary equipment, garden tools, seeds, and perhaps poultry and livestock in some cases if warranted. Total per family cost should not run over \$4,000 if we standardize the procedure, and at present rates of interest that would be a saving of several hundred dollars per family as compared to present relief costs.

In order to give the applicant an opportunity to make an investment in the property, I suggest each one be permitted to work on same and that credit be given part in cash and part in credit out of the grant by the Government.

It is also suggested that great latitude be allowed to the States in their local enabling acts so as to give cooperatives, private contrac-

tors, realtors, and other interested groups opportunity to avail themselves of such a program for the benefit of their members or themselves.

These homes could be lived in by the unemployed as long as unemployed but the Government would reserve title so the occupant could not sell, mortgage, or otherwise dispose of same. They could be purchased by the occupant as soon as financially able, and encouragement provided along that line. Provision should also be made to provide expert advice on gardening, canning, upkeep, and other details for the preservation of values, and the successful operation of these suburban residential projects.

Home ownership and happy family life is the best foundation on which to build a successful democracy. Let us start at once and end unemployment, slums, and destruction.

KNUTE HILL.
JOHN G. ALEXANDER.
JOSEPH E. CASEY.
ABE MURDOCK.
ADOLPH J. SABATH
J. JOSEPH SMITH.

REPORT OF THE COMMITTEE ON SOCIAL SECURITY, OLD-AGE PENSIONS, AND UNEMPLOYMENT

INTRODUCTORY STATEMENT

National recovery in the United States is entirely dependent upon an adequate and sustained purchasing power in the hands of the American people. If business and industry are to be assured of opportunity for the steady production of goods, with reasonable profits, and if labor is to be assured stable and sufficient employment, with living wages, purchasing power must keep pace with production.

Economic stability depends today almost entirely upon the expansion of demand. With adequate purchasing power available, demand for commodities and services will come naturally, and this demand will force increased production, and in turn, stabilize employment and make more work available.

Annually about 15 to 20 percent of currently received income is neither spent nor invested but is saved. This means that this amount is taken out of circulation, reducing the volume of active purchasing power and causing more unemployment. The main question is, How, under the circumstances, are we going to consume all we can produce?

Part of our people can produce enough for all of the people. It is necessary that some group be enabled to consume without taking part in production. There are a considerable number of persons in the country who, through no fault of their own, cannot take part in production. In this "age" it is almost impossible for a man to get a job after he reaches the age of 60. This group over 60 years of age, who have toiled the longest, should not be deprived of taking part in the consumption of goods. They are the victims of an industrial system for which they are not responsible.

We owe a duty to our old folks and we can perform this duty by establishing a national annuity system on a pay-as-you-go basis, drawing upon some of the idle savings as means of financing it. This plan would take care of all groups that are American citizens over the age of 60. They would be paid by the Federal Government an amount determined by prorating the tax revenue derived from the special taxes levied for this purpose. The revenue will be derived from a broad general tax plus taxes which will operate to reduce the volume of idle savings and make more funds available for active consumer buying power.

ANALYSIS

Probably the central reason for unemployment today is failure of consumer buying power to keep pace with the production of goods and services. If we are to have a full employment, it is necessary for production of goods to be continuously balanced by an equivalent flow of consumer demand.

On the other hand, the only way to meet the 71 demands to insure sq ad bim bim oot no mizzez to mizez a zd a tnd

Certain facts in recent experience have important bearing on this question. These facts are as follows:

(1) Production tends to increase faster than employment.
(2) Under modern scientific methods of production, part of the people are able to produce enough for all the people.

(3) If, however, all the people do not consume their reasonable share of national production, inventories increase, production must be reduced, and even those currently employed will be in danger of losing their jobs.

(4) In the closing months of 1939, the Federal Reserve index of industrial production stood at the highest figure on record and in the whole year 1939, the production of goods and services equaled that of 1929. This, however, was accomplished with the employment of a million less people than were employed in 1929. It was inevitable under these circumstances for inventories to increase and for production itself to be curtailed so that today the index of production is once again falling.

(5) Various methods have been employed to try to keep consumer demand in line with production. Between 1922 and 1929 the consumers of the country had contracted a debt of between \$9,000,000,000 and \$11,000,000,000 for purchases which they had made on the installment plan. That is, they had attempted to purchase goods in an amount of \$9,000,000,000 in excess of their incomes. This could not go on and it was one of the causes of the crash of 1929. It would have come much sooner had it not been for people buying goods beyond their incomes. They tried to stretch consumer demand to equal production. It couldn't be done.

(6) We find that persons 60 years of age and older, once they have become unemployed, find it almost impossible to get back to work again. There are various factors which cause this, among them those connected with industrial insurance and retirement systems. It is a fact, however, which must be taken practically into account.

(7) In various ways an attempt has been made to bring about better adjustment between production and consumer demand by enabling certain groups to consume even though they do not take part in production. Relief, retirement systems for Government employees, and certain categories of social security are examples of this.

OUTLINE OF PROPOSED ANNUITY SYSTEM

If it is necessary for some group in society to be enabled to consume its share of national production without contributing to that production, then obviously this group should be those people who have worked the longest and contributed most in the past to our national wealth and to the building up of our very efficient productive machine. This evidently indicates an old-age annuity system.

It is agreed by most economists that the central cause of unemployment today is that too large a proportion of our national income is saved and set aside in idle pools of money which are neither spent nor promptly invested by their owners. This would indicate the importance not only of stimulating investment but of accomplishing a transfer of a portion of the funds now held out of use in surplus savings into the stream of active consumer buying power. The best way to do this is by a system of taxation on the one hand, and the payment of

old-age annuities on the other. In our opinion such a measure would contribute as much to a restoration of confidence as anything that could be done. For all these reasons, we believe there should be a national system of pensions established in this country for those people who have passed the age where they can reasonably be expected to secure employment in industry. The particular features of such an old-age annuity system, we believe, should be as follows:

(1) It should be pay-as-you-go system. That is to say all money collected in taxes for the purpose of providing such pensions should be promptly disbursed to those eligible to receive it.

Principal criticism of the present social security contributory system (title 2) is its serious deflationary influence. In the fiscal year 1940 both the unemployment insurance system and the old-age annuity system will be taking money out of circulation at a net rate of \$50,000,000 a month. That is over the whole year those two programs will collect in tax \$1,200,000,000 more than they pay out in benefits. This literally means that \$1,200,000,000 worth of goods produced in 1940 will not be able to be sold unless the Government unbalances its budget by \$1,200,000,000 to compensate for this deflationary influence.

Furthermore those population groups, such as farmers, farm laborers, domestic servants, and others who do not participate in any way in the benefits from either the unemployment insurance or old-age annuity systems, must constantly pay a portion of the pay-roll taxes (indirectly through higher prices) to make possible the payments to the special groups which are covered. Therefore, our next point is:

(2) Pensions should be paid to all American citizens over 60 years of age who are retired from industry. (If desired to deny the pension to persons who clearly do not need it, it could be required that persons who are liable to the payment of a Federal income tax must return, at the time the tax is paid, any money received as pension payments during the previous year. This would leave the pension system as simple as possible, requiring no investigator staff or individual records.)

(3) There should be no difference in the amount of payments made by the Federal Government to people in different States. The States may, of course, supplement Federal payments as they see fit, but the basic pension system should be a straight Federal system supported by Federal taxes and with payments made directly by the Federal Government.

(4) The revenue for such a system should be derived first from broad general taxes whereby practically everyone in the population will pay at least a small amount to support this national system of old-age security. Another portion of the revenue should come from such taxes as will operate to reduce the volume of hoarded funds and to accomplish the necessary shift out of those holdings into active consuming buying power. The gross income tax is an example of the first kind of tax, whereas, income taxes, inheritance, estate, and gift taxes are examples of the second kind.

(5) The size of the pension should be determined by prorating the tax revenue derived from the special taxes levied for this purpose among all those eligible to receive the pension. But the policy should be to fix the tax rates at such a point as to yield to each pension recipient his proportionate share of the national income.

Such a system as we have outlined would avoid the complicated system of bookkeeping now required both on the part of the individual employers and on the part of the Social Security Board itself. It would make possible elimination of the pay-roll taxes and of the attempt to maintain individual records on upwards of 40 million workers. It would make possible the inclusion of all occupational groups of citizens and it would bring to an end the serious deflationary influence of the current attempt to accumulate reserve funds.

(Signed:) Frank B. Keefe (chairman), Homer D. Angell,
R. T. Buckler, Franck R. Havenner, Gerald W.
Landis, Martin Smith, John H. Tolan, Jerry Voorhis.

REPORT OF THE COMMITTEE ON TAXATION AND UNEMPLOYMENT

Mr. Chairman and members of the Conference, the Subcommittee on Taxation and Unemployment, of which I have the honor to be chairman, has made as thorough a study of our subject as is possible in the limited time available prior to the deadline for submitting reports to the Conference.

The field of taxation is so broad and so intricate that a comprehensive report would require at least a volume. The brevity of this report should be conclusive proof of our inability to master this subject to which has been given a lifetime of study by those qualified to call themselves experts.

In our preliminary report to the Conference we stated that among our studies were included such taxes as gross income and the so-called techno tax. On the latter the committee has reached no conclusion and on the former—the tax on gross income—the committee is in disagreement due partly to the fact that it has been impossible to obtain any convincing figures on the amount of revenue such a tax would produce and the lack of precedent other than the limited experience of Indiana and Hawaii.

A study of the Federal revenue shows that the principal sources for carrying on the functions of the Federal Government are as follows, in round numbers: Corporation taxes, \$1,500,000,000; individual income, \$1,225,000,000; pay-roll taxes, \$775,000,000; and the following five special taxes, each producing around \$500,000,000 annually: (1) Estate and gift, (2) tobacco, (3) liquor, (4) sales, (5) customs.

That gives a total revenue of \$6,000,000,000, with a larger amount needed for current Government expenses.

It is evident that unless taxes are to be punitive in nature, no more should be levied than is necessary to run the Government. We agree that in order to keep expenditures in balance with income two steps are necessary: First, the practice of rigid economy in the conduct of Government; and, second, the levying of sufficient taxes to produce the needed revenue. Some types of taxation, however, are more fruitful of revenue to the Federal Government than of jobs to the unemployed, as for instance pay-roll taxes and such taxes as prevent industry or the individual from freely increasing their business or making investments which permit the expansion of business.

The necessity for adequate Government revenues being generally accepted, we have limited our research to an examination of the various types of taxation, the imposition of which would increase employment or the exemption from which would have a similar effect.

The subcommittee subscribes to the theory that any just tax should be based first on ability to pay, and, second, on benefits received.

It seems obvious to us that where income is, there must be the tax; and we deplore the wholesale practice of political subdivisions and taxing bodies to resort to any tax which at the moment seems most likely to yield the needed revenue regardless of equity or the ultimate effect on employment.

We cannot fail to take other than a condemnatory attitude toward those local taxing bodies who resort to this practice. Therefore, in addition to suggesting that most of the recommendations applying to Government taxes be likewise applied to local taxes, we further believe that a most salutary effect on reemployment could be produced by the exemption from all property taxes of a home or farm equity of at least \$1,500 for each home owner.

In this same category we might mention the common practice of imposing hidden taxes on the one hand and sales taxes on the other. Both reduce the actual consuming power of the Nation, since fully 80 percent of the people could and would consume more if they had more purchasing power. The corollary to this, of course, is that by consuming more of the products of agriculture and of industry, those two great pillars of our national economy will require more hands to furnish the needed supplies.

Rather do we believe that those who receive the greater share of the national income should assume the greater share of the burden of Government, both local and national. Therefore we are convinced that one of the surest ways to increase employment is to assure to the family of the low-income group every penny of its hard-earned income that it may buy and consume the maximum of food and clothing and shelter and thus provide jobs for those whom agriculture and industry must hire to furnish that family with these things.

This necessarily will entail an increase in taxes if the legitimate needs of government are to be met. We are further of the opinion that individual income taxes can be increased without undue hardship. We suggest both a broadening of the base and a rate increase in certain brackets.

By reducing the single person's exemption to \$600 of earned income per year and the married couple to \$1,000, and by increasing the rate for the middle-income brackets, it is believed that practically all the sales and hidden taxes might be reduced or even eliminated, and that a balanced Budget would result.

There is no doubt in anyone's mind that the recipient of a net income of \$25,000 could well afford to pay a higher rate and still be in a relatively more secure position than is the taxpayer in any other country in the world. A comparison between our present rate and that of the citizen of Great Britain shows this very conclusively. For instance, a \$25,000 net income pays a Federal tax of \$2,327. The taxpayer could afford to pay, in addition to this, the California State income tax and the District of Columbia tax and still pay a total tax to three taxing bodies of just one-half what the resident of London pays, or \$3,800 against \$7,600.

Other recommendations to equalize and increase the taxes on individuals are as follows:

1. Require husband and wife to file a joint return.
2. Limit the deductibility of taxes and interest on owned homes to maximum of \$500.

3. Replace the present method of allowing interest received from tax-exempt securities as a deduction from gross income by a tax credit on tax-exempt securities.

The same arguments advanced in favor of increased income taxes on individuals hold good in consideration of corporate income taxes. The subcommittee mentions several effective proposals to bring about an increase of revenue from these sources:

1. Revise the corporation income tax on life insurance companies. Under the present system life insurance companies pay only a negligible amount of Federal corporate income taxes.

2. Include in taxable income all interest paid on long-term obligations (beyond 5 years).

3. Treat the interest received on tax-exempt securities as advocated in individual income.

The subcommittee believes that nothing is to be gained by lowering or abolishing such taxes as those on liquor and tobacco and therefore suggests their retention. Likewise customs duties. However, we are agreed that estate and gift taxes could well be revised upward and that the tax-exempt limit of \$40,000 on estates should be reduced to \$25,000 and that of \$4,000 on gifts be reduced to \$2,500.

It is proper at this point to advance the proposal that hereafter the issuance of tax-exempt securities be prohibited. The committee feels thoroughly convinced on this point. There is, of course, no sure way of compelling wealth or those in receipt of the major share of the national income to invest their funds in such a way as to produce greater employment. We believe, however, that it is a most indefensible practice to permit accumulations of wealth to obtain the greatest security in the Nation and at the same time as receiving this protection to pay not one cent for the support of Government which provides this protection.

The magnitude of this tax evasion is understood when it is pointed out that there are billions of tax-exempt securities outstanding today of which "Governments" alone account for \$49,355,900,000.

And of the Government securities \$35,000,000,000 are partially tax-exempt and \$14,500,000,000 completely and entirely tax-exempt. In other words, an individual owning \$1,000,000 worth of these latter securities from which he receives an income of, say, \$30,000 per year, pays not a dollar in taxes. An individual owning \$50,000,000 worth of these securities has an income of \$4,000 a day and does not contribute a cent to the support of his Government. So it can readily be seen from the figures which we have obtained from the Treasury, that these \$14,500,000,000 worth of completely tax-exempt Government securities outstanding today provide an avenue of escape from taxation that is in reality a boulveard.

The members of this subcommittee feel that unless we tax the incomes of those people of the United States who have incomes, neither will we be able to carry on the legitimate functions of Government nor will we ever increase the purchasing power of all the people which alone can give jobs by increasing the demand for goods and services.

The following two suggestions advanced by certain members of the committee have not received the approval of the majority; but because of their originality and far-reaching effect are offered as part

of this report in the hope that their objectives may some day be reached by a method both just and universally approved.

It is estimated that there are at present 57 billions of idle bank deposits in this country of which 30 billions are time deposits and 27 billions demand deposits. A large proportion of these deposits represents accumulated income which, if put to work in business channels, would give employment to hundreds of thousands of men.

During the period from 1920 to 1930 there was an average annual sum of over \$4,200,000,000 that flowed from investors through investment banks into the purchase of newly issued bonds and stocks of business corporations. Undoubtedly these new capital funds created millions of new jobs. But since 1930 there has been an average of only \$700,000,000 flowing annually into industries through investment in new securities. This is only one-sixth of the previous amount.

We have wrestled with the problem of how the income held as idle bank deposits and other secreted and idle funds could be released to legitimate enterprise and have come to the conclusion that the only legal way would be by the imposition of a tax on only that share which remains inactive and a suspension of the tax from that share used in productive enterprise.

In order that this tax may not interfere with the building up of a rainy-day reserve for the average citizen, it could be imposed only on those with \$10,000 a year or more of taxable income. It would naturally remain with the revenue-imposing body to determine what the minimum income would be to escape this tax and also to set up a yardstick to determine what share of the taxpayer's income was not resent in a manner that would produce income to others so that thrift would be encouraged and the mere acquisition of wealth discouraged.

The final suggestion is for the imposition of a tax on debt instruments. When it is considered that practically the whole complicated set-up of courts of equity and most of civil law is for the protection of instruments of debt, it seems that the security the holders of such instruments receive should be worth the imposition of a small tax. Especially, is this true of short-term debts which are usually accompanied by high rates of interest and quick turn-over.

While it is true the holders of this debt paper are subject to the regular income tax, a special tax could well be imposed which could be both equitable and just.

The Subcommittee on Taxation thus concludes its final report to the Conference on Unemployment.

Respectfully submitted.

WILLIAM T. BYRNE,

JOHN D. DINGELL,

MERLIN HULL,

ROBERT F. RICH,

ED. V. IZAC, *Chairman.*

SUMMARY REPORT OF THE COMMITTEE ON TECHNOLOGICAL CHANGE AND UNEMPLOYMENT

It is an acknowledged fact that, in the great upward sweep of America's industrial development which took place between the years 1900 to 1930, technological change played an important part. It was during these years of economic expansion that new machines—"labor-saving" devices—served to double and redouble America's volume of production to the end that employment opportunities were increased rather than decreased.

The manifest failure of technological change to achieve in the decade of the thirties what it achieved in previous decades (despite the fact that the pace of technological improvement was even accelerated after 1930) suggests that our problem should not be considered as one of throttling the machine but as one of checking abuses in its use. In the past, technological change has aided the multiplication of employment opportunities because through mechanization, costs were lowered drastically, and as costs were lowered, more goods were sold, and as more goods were sold more and more workers were required to make, service, and distribute them. Considered in the light of this theory, technological change actually increases labor requirements; but, on the other hand, it can readily be seen that when technological change is not followed by the lowering of prices consumption does not register any notable increases, thereby resulting in the employment of fewer men to produce the same amount of goods.

The question of whether a given technological improvement or new labor-saving device serves to increase or decrease employment opportunities is decided largely by the subsequent presence or absence of price reduction. If prices are not reduced as new machines are introduced the theory of increasing employment by increasing the total of productivity breaks down completely. It is the significant failure, in recent years, of prices to go down with the introduction of new machines that has created the need for sweeping adjustments at this time.

In striking at the problem of unemployment as related to technological change, we must adopt either of two courses of action: (1) Set aright the factors which have prevented price reductions from taking place as new machines were introduced, or (2) throttle the invention of new machines. Since, as it has been noted, the introduction of labor-saving devices accounted largely for the doubling and redoubling of America's volume of production and consequent rise in living standard during the years 1900 to 1930, junking of new machines would not seem a very enlightened or sensible approach to this problem. It would seem best to move in the direction of increased employment by setting aright factors which tend to prevent price reductions from taking place as new machines are introduced.

What has done most to thwart the proper functioning of that process by which new machines lower costs drastically, and as costs are

lowered, more goods are sold, and as more goods are sold more and more workers are required to make, service, and distribute them? What, in other words, seems to be the principal factor preventing the necessary price reduction which starts the ball rolling toward increased volume of productivity and employment? More than anything else, the unchecked growth of monopoly has made prices fixed and rigid—so fixed and rigid, in fact, that the introduction of new machines has ceased to be followed by lowering of prices. In the absence of competition producers have little inclination to pass on to the consumer savings wrought by the installation of labor-saving devices. Hence the necessary rise in consumption fails to occur and the reemployment of those thrown out of work by reason of new inventions does not take place.

During the past decade technological development has been notable but little has been accomplished insofar as lowering of prices is concerned. In a number of industries, such as that of the automobile—which made tremendous increases in its labor requirements between 1920 and 1930 because of increased consumption realized through constant reduction in prices—labor requirements are no longer increasing in proportion to technological advancement. Consumption has leveled off because prices have not been reduced as new machines have been introduced. And, as already pointed out, if prices are not reduced in accordance with the introduction of new machines, the result is curtailment of employment opportunities—or unemployment. These findings suggest mainly one thing: monopoly and machines do not mix.

While the subcommittee is not prepared at this time to submit a full and complete report on its analysis of ways proposed to deal with this phase of the problem, it is felt that special attention should be given to the undertakings of the Department of Justice, Federal Trade Commission, Securities and Exchange Commission, Temporary National Economic Committee, and other agencies attacking the problem of monopoly.

Considering another phase of the question of technological change and unemployment, the subcommittee found that while it may not be possible to completely eliminate individual employment dislocations which accompany technological progress, much can be done to lessen the problem of adjustment for displaced workers. In the Federal Security Agency we have a good approach to this problem which must be met by unemployment compensation as well as assistance in locating new employment opportunities for displaced workers.

The committee expects to submit a report later carrying specific recommendations with respect to the work of governmental employment offices.

(Signed) **JOSEPH R. BRYSON, Chairman.**

ROBERT G. ALLEN,

FRANCIS CASE,

FRANK CROWTHER,

RAYMOND S. McKEOUGH,

CLARENCE J. MCLEOD,

RUDOLPH G. TENEROWICZ,

RICHARD J. WELCH,

Committee Members.

which can be obtained out of this same period are probably technological inventions which, although not necessarily new, are the result of new or improved combinations to greatly expand man's power over his environment.

REPORT OF THE COMMITTEE ON TECHNOLOGICAL CHANGE AND UNEMPLOYMENT

At the beginning of the twentieth century our Nation stood on the threshold of a great era of technological development. Many new, important inventions, such as the telephone, the airplane, the radio, the motion picture, the automobile, were then destined to set the pace for a period of amazing growth in American industry.

Aside from the new inventions which resulted in the creation of entirely new industries, there were during that 30-year period (1900-30), other inventions which enabled established industries to expand and increase their output. According to the National Resources Committee the available mechanical power rose from 70,000,000 horsepower in 1900 to approximately 1,231,000,000 horsepower in 1935—an increase of 1,659 percent.

Mass production ushered in and with it the economic phenomenon of men producing greater quantities of better quality goods with less expense of time and effort suddenly appeared. The effect of mechanization on human labor is reflected in the fact that 43 men in 1933 produced the volume of goods that required 118 men in 1899. Thus, in 1933, 1 man, with the aid of the machine, could do almost 3 times as much work as he was able to at the turn of the century. During this same period production of manufactured goods rose over 240 percent.

Did the fact that only 43 men were needed in 1933 to produce the same volume of goods as 118 produced in 1899 curtail employment opportunities in industry? The answer would seem "No," since it has been reported by the National Conference Board that from 1870 to 1930 the proportion of gainful workers in the total population rose from 32.4 percent to 39.8 percent, an increase of 7.4 percent.

It is explained that during the period 1899-1929 technological change aided in the multiplication of employment opportunities because: Through mechanization, costs were lowered drastically, and as costs were lowered, more goods were sold, and as more goods were sold more and more workers were required to make, service, and distribute them. Thus, when a technological improvement is followed by lowering of prices, workers who would otherwise be displaced are required to assist in producing a larger supply of goods which are needed to meet the increased demand. Here we see what happens when the benefits of mechanization are "passed on" so that everyone from the consumer back to the manufacturer profits. So far as our study of the problem of technological change and unemployment is concerned the most important thing to note is that passing along the benefits of mechanization usually results in increased employment.

In reading this report one might readily conclude that your committee has argued the case for technological change. We have done just that. And as we develop the second part of our report we shall still be arguing the case for and not against technological change;

although our analysis must shift to the other side of the question. We now examine the damaging, destructive effect of technological change on employment, not because we wish to discredit the possibilities of the machine, but because we wish to expose certain abuses in its use and then recommend ways and means to check these abuses.

What happens when the benefits of mechanization are passed on has already been demonstrated. But what happens when these benefits are withheld? The answer is most important, withholding of the benefits of mechanization leads to unemployment. When a given technological change is not followed by a lowering of prices, consumption does not register any notable gain; the public purchases the same quantity of goods; fewer men are needed to turn out the same quantity of goods so the final result—fewer men at work; more men relegated to the ranks of the unemployed.

The question of whether a given technological improvement or new labor-saving device serves to increase or decrease employment opportunities is decided largely by the subsequent presence or absence of price reduction. If prices are not reduced as new machines are introduced, the theory of increasing employment by increasing the total of productivity breaks down completely. It is the significant failure, in recent years, of prices to go down with the introduction of new machines that has created the need for sweeping adjustments at this time.

In striking at the problem of unemployment as related to technological change, we must adopt either of two courses of action: (1) Set aright the factors which have prevented price reductions from taking place as new machines were introduced, or, (2) throttle the invention of new machines. Since, as it has been noted, the introduction of labor-saving devices accounted largely for the doubling and redoubling of America's volume of production and consequent rise in living standard during the years 1900-30, junking of new machines would not seem an enlightened or sensible approach to this problem. It would seem best to move in the direction of increased employment by setting aright factors which tend to prevent price reductions from taking place as new machines are introduced.

What has done most to thwart the proper functioning of that process by which new machines lower costs drastically, and as costs are lowered, more goods are sold, and as more goods are sold more and more workers are required to make, service, and distribute them? What, in other words, seems to be the principle factor preventing the necessary price reduction which starts the ball rolling toward increased volume of productivity and employment? More than anything else, the unchecked growth of monopoly has made prices fixed and rigid—so fixed and rigid, in fact, that the introduction of new machines has ceased to be followed by lowering of prices. In the absence of competition producers have little inclination to pass on to the consumer savings wrought by the installation of labor-saving devices. Hence, the necessary rise in consumption fails to occur and the reemployment of those thrown out of work by reason of new inventions does not take place.

During the past decade technological development has been notable but little has been accomplished insofar as lowering of prices is concerned. In a number of industries, such as that of the automobile—which made tremendous increases in its labor requirements between

1920-30 because of increased consumption realized through constant reduction in prices—labor requirements are no longer increasing in proportion to technological advancement. Consumption has leveled off because prices have not been reduced as new machines have been introduced. And, as already pointed out, if prices are not reduced in accordance with the introduction of new machines, the result is curtailment of employment opportunities or—unemployment. These findings suggest mainly one thing: Monopoly and machines do not mix.

Since the committee on monopoly has already addressed itself to a careful consideration of ways and means to attack the problem of monopoly, further discussion is not necessary here. It is felt that, as suggested by our committee on monopoly, special attention should be given to the undertakings of the Department of Justice, Federal Trade Commission, Securities and Exchange Commission, Temporary National Economic Committee, and other agencies striking at the problem of monopoly.

Thus far, we have been considering the effect of technological change on employment in general. We now, briefly, touch upon the effect of technological change in specialized fields of employment. The number of men and women who are thrown out of work because particular technological developments render their special skill or trade "obsolete" may constitute only a small percentage of our total unemployed but their individual problems are the most acute. What happens to the glass blower when the machine comes in and takes his job? If the glass blower is young when this technological advance hits him, he probably will experience less difficulty than some elder associate in making an adjustment, but still he is forced to change his occupation which is certainly no easy task for a man whose whole background of training and experience has been in one field.

The Federal Security Agency offers the most immediate hope of minimizing the problems of temporary dislocation among workers who are caught in situations similar to that of the glass blower, just depicted. Unemployment insurance and old-age pensions are important as well as Government-sponsored employment offices. The committee recommends careful consideration of legislation which will increase the effectiveness of the Federal Security Agency. The committee also recommends a series of conferences with officials of the Federal Security Agency and Department of Labor for the purpose of fashioning a well coordinated attack on the related problems of technological unemployment.

JOSEPH R. BRYSON, *Chairman.*
ROBERT G. ALLEN.
FRANCIS CASE.
FRANK CROWTHER.
RAYMOND S. McKEOUGH.
CLARENCE J. MCLEOD.
RUDOLPH G. TENEROWICZ.
RICHARD J. WELCH.

distance through which note money has to be carried in order to be used in a distant town or in a distant region—being an indication of the distance and consequences of the movement of money and credit from one place to another and making necessary the use of a bank or a post office to receive and forward the money.

REPORT OF THE COMMITTEE ON INTERSTATE TRADE BARRIERS AND UNEMPLOYMENT

Once the largest free-trade area in the world—thanks to the experience of the colonies during the federation—the United States has today disintegrated into a "Balkanized" mesh of trade barriers.

"Perhaps the greatest menace to the internal economy of the United States today" says State Government in its editorial for March 1939, "is the growth of * * * trade barriers among the States. * * * Without exception they are the symptoms of an economic disease, which if not checked will result in the paralysis of internal trade in the United States. Already, it is evident that this new complication is sapping the strength of our domestic economy at a time when all its energies are necessary if its convalescence is to result in complete recovery."

For the most part our man-made interstate barriers take the following form:

1. Those affirmatively created by State laws and regulations.
2. Those affirmatively created by Federal laws and regulations.
3. Those created by monopolistic control in commerce and industry.

Their results are reflected immediately in lower wages for labor, lower prices for agricultural commodities and raw materials, reduced profits; decreased purchasing power and in decreased employment. And for it all, says State Government (Ib), "the general consuming public pays the bill."

The period between 1782 and 1787 is classed by most historians as the most critical period in American history, and many of the most serious problems grew out of trade barriers at that time between the Colonies. This caused much hard feeling between the Colonies, and as a result when the Constitution was written clause 2 of section 10 of article I was placed in the Constitution so as to prevent a reoccurrence of trouble experienced by the Colonies. The provision is as follows:

No State without the consent of Congress, may lay any imports or duties on imports or exports, except what may be absolutely necessary for executing its inspection laws, and the net produce of all duties and imports, laid by any State on imports or exports, shall be for the use of the Treasury of the United States; and all such laws shall be subject to the revision and control of the Congress.

This clause of the Constitution was passed upon in an early case in 1827, *Brown v. Maryland* (12 Wheat. U. S. 419, 436, 442, 444). In that case a State license fee was imposed upon an importer selling imported goods in the original bales or packages. The Court held it repugnant to the import and commerce clauses of the Constitution of the United States.

Chief Justice Marshall in delivering the opinion of the Court at page 444, said:

All must perceive that a tax on the sale of an article, imported only for sale is a tax on the article itself; * * * the tax on the occupation of an importer

is * * * tax on importation. It must add to the price of the article, and be paid by the consumer, or by the importer himself, in like manner as a direct duty on the article itself would be made. This the State has not a right to do, because it is prohibited by the Constitution.

In the case of *Anglo-Chilean Corp. v. Alabama*, decided in October 1932, and cited in United States Reports, volume 288, at page 226, the Court, citing the case of *Millents v. Buren* (282 U. S. 216 at p. 228), said: "When the Constitution prohibits States from laying duties on imports, the prohibition not only extends to a tax upon the act of importing, but also to one upon the occupation of the importer or upon the articles imported. A tax on the sale of an article, imported only for sale, is a tax on the article itself," citing *Brown v. Maryland* (12 Wheat. 419, 444), *Almy v. California* (24 Howard 169), *Fairbank v. U. S.* (181 U. S. 283), *Lilliger v. Kentucky* (213 U. S. 200), *U. S. v. Braslef* (237 U. S. 1), *Thomas & Nersey Ins. Co. v. U. S.* (237 U. S. 19), *Crew Lenck Co. v. Pennsylvania* (245 U. S. 292, 295), *Sonneborn Bros. v. Curetare* (262 U. S. 506, 509).

The constitutional protection extends to corporations as well as to individuals. *Crutcher v. Kentucky* (141 U. S. 47, 57), *International Text Book Co. v. Pigg* (217 U. S. 91, 108). See also *Leaux Reundy Co. v. Cope* (235 U. S. 197), *Looney v. Crane Co.* (245 U. S. 178, 188), *Alpha Cement Co. v. Mass.* (268 U. S. 203), *Sprout v. South Bend* (277 U. S. 163, 170-171), *East Ohio Gusto v. Tax Commission* (283 U. S. 465, 470).

(See also *Hale, Chairman, et al. v. Brinko Trading Co., Inc., et al.*, decided at October 1939 term of Supreme Court of United States and reported in volume 306 U. S. 2, 188 to 397. Also cited in official reports of the Supreme Court, August 3, 1939.)

Just one example of trade barriers of the Colonies in 1787 will illustrate in a very simple manner what the States are doing today and what the framers of the Constitution thought they were going to prevent when the Constitution was written.

The city of New York, with a population of 30,000 people, had been supplied with firewood from Connecticut, and butter, cheese, and chickens from New Jersey. New York City, then as now, wanted all this money at home but the question was how to get it. A trade barrier was finally decided upon and entrance fees were charged for every sloop that came down through Hell Gate from Connecticut, and for every boat rowed from across Paulus Hook to Courtland Street.

Of course, Connecticut and New Jersey Yankee farmers did not take kindly to this. The New Jersey Legislature made up its mind, just as legislatures do these days, to retaliate. But where and how? They finally discovered that New York had bought a small patch of ground on Sandy Hook for a lighthouse. The legislature promptly laid a tax on it of \$1,800 a year. Connecticut agreed to not do any business with New York, and businessmen agreed unanimously upon a penalty of \$250 for the first offense, and this ban was to continue for a period of 12 months. Historians say if it had not been for the good work done by the Federal Convention, it would not have been 5 years until there would have been civil war among the Colonies themselves. To these commercial disputes were added territory disputes. Today we are only trying to repeal history.

THE CONSTITUTIONAL PROHIBITION

Article 1, section 8, of the Constitution provides that: "The Congress shall have power: To regulate commerce with foreign nations and among the several States * * *." This power is specifically limited by the tenth amendment which provides that: "The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people."

Chief Justice Marshall said of this provision in 1824, in his celebrated opinion in *Gibbons v. Ogden*, "If there was any one object riding over every other in the adoption of the Constitution, it was to keep commercial intercourse among the States free from all individual and partial restraints." And why not? Had not the "several States" tried individual control of trade and commerce under the federation—and with disastrous results?

However, as we shall point out later, the evasions of the constitutional provisions by the States, by the Federal Government itself, and by American business and industry without interference from either the State or National Government—and all with the approval of the Supreme Court of the United States—have become so numerous, so effective, and so far-reaching that free trade, so vital to the American standard of life, bids fair to perish.

SPECIFIC BARRIERS, THEIR CAUSES AND EFFECTS

Of what are these monstrous and unscalable walls around States and sections of our country composed?

I

Here are some of these created by State laws and regulations:

1. The use tax now levied by many States on goods imported—and with the approval of the Supreme Court. "The tax," said Justice Cardozo, "is not upon the operations of interstate commerce, but upon the privilege of use after commerce is at an end." Typical of these is the statute of the State of Washington levying a tax on the "machinery, materials and supplies, such as locomotives, cars, conveyors, pumps, and trestle steel * * * bought at retail in other States." The motives behind the use tax are chiefly (1) to raise revenue in these depression years, (2) to encourage home industries, and (3) to retaliate for some barrier raised by the importing State. The result is, inevitably, higher living costs, stifled production, and increased unemployment.

Take Wisconsin's experience with the oleomargarine tax. In 1935 Wisconsin was at peace with the South, and for that matter with the rest of the world. It is a great dairy State, and considerable oleomargarine was being shipped into the State, which for some purposes took the place of butter produced in the State. As a result a bill was introduced to tax oleomargarine sold in the State 6 cents per pound. The South did not object seriously to this and business proceeded as usual and the tax was paid. There is no question but what the members of the legislature meant well, but the results do not seem to justify the harsh action taken.

It was, however, a good political issue and in 1937 the tax was raised to 15 cents per pound. Well, it is needless to state what happened, but for the purpose of the record here, briefly this is what did happen: But few retailers paid the tax. It would be just like putting a tax on gasoline of 10 or 15 cents a gallon. People would think of some scheme to get rid of paying the tax, and you would not collect more in taxes than if it was 5 cents a gallon. This has been the history of the gasoline tax. This was the history of the oleo-margarine tax in Wisconsin. But very few paid it. As a result in a very short time small merchants all over the State were owing the State thousands of dollars in taxes. Was it legal to collect it? That question has never been determined by the highest court of the land. Was it wise to sue to get it? No. First, it would cost as much to collect in small amounts as the amount you would get in the end. Secondly, politically to sue your constituents would not make them feel very kindly toward you. So the only thing left to do was to coax these small amounts out of the local merchants.

The actual loss to the South was not great. People bought oleo-margarine just the same if they wanted it and the tax was not collected. The thought of the tax was much greater for the South to stand than the actual loss of business. As a result, however, the South began dairying in their own States and quit buying cheese and butter from Wisconsin. This was not as general as people have been led to believe, but it did follow to some extent. Industrialists have reported that contracts for goods were canceled by the South and jobbers refused to buy more goods because of this tax.

So that the committee may have excerpts from some of the decisions of the court of local resort we quote here from a few outstanding cases.

In an early case decided in 1860, the Supreme Court of the United States in the case of *Almy v. People of California* (24 Howard U. S. 169), decided that a stamp duty imposed upon bills of lading for gold or silver, transported from the State of California to any part or place outside the State was a tax on exports and was unconstitutional. Chief Justice Taney delivered the opinion of the Court and cited the law laid down in the case of *Brown v. Maryland* (12 Wheat, U. S. 419), an early case covering a similar state of facts to sustain the positions of the Court. In that case the State of Maryland, in order to raise revenue for State purposes, required all importers of certain foreign articles and commodities enumerated in the law, or other persons selling the same by wholesale, before they were authorized to sell, to take out a license, for which they were compelled to pay \$50, and in case of refusal or neglect to do so, they forfeited the amount of the license tax, and were compelled to pay a fine of \$100 upon conviction. The law in the case of *Brown v. Maryland*, heretofore referred to was applied by the Court, and the statute held unconstitutional.

Coming down to a case decided 40 years later, *Fairbank v. U. S.* (181 U. S. 283), a similar situation to the *Almy case*, decided 40 years earlier, was presented to the Court. In this latter case a stamp tax was imposed the same as in the *Almy case*. The contention of the defendant was that the law was in conflict with article I, section 7, of the Constitution of the United States providing "No tax or duty shall be laid on articles imported from any State." Justice Brewer delivered the opinion of the Court.

The language of the court on page 291 is impressive. The court said:

The power to tax is the power to destroy. And that power can be exercised not only by a tax directly on articles exported but also and equally by a stamp duty on bills of lading evidencing the export. * * * The question of power is not to be determined by the amount of the burden attempted to be cast. The constitutional language is "No tax on duty."

In the case of *Alpha Cement Company v. Mass.*, 268 U. S. at page 219, the court said:

It is settled that where by way of duties laid on transportation of subjects of interstate commerce, or the receipts desired therefrom, or on the occupation or business of carrying it on, a tax is levied by a State on interstate commerce, such taxation amounts to a regulation of such commerce and cannot be sustained.

2. Highway barriers and these are many—

The truck war between the States broke into the open in 1934 when Kansas created her ports of entry, posted guards, checked all trucks in and out under stringent regulations. Oklahoma and Nebraska retaliated and the war was on. Huge signs at the Kansas ports read, "All trucks entering Kansas must register at port of entry, penalty \$100 fine." Oklahoma went a step further, making her signs to read, "All trucks and busses entering Oklahoma must register at port of entry, penalty \$100 fine." Then Nebraska posted her signs which read, "Nebraska State law—all trucks, towed ears, cars for resale, must stop at port of entry for inspection and permit." Nineteen States have followed suit.

California and Arizona for years have stopped both trucks and private automobiles at their ports of entry and have pilfered through even the personal effects of their occupants, under the guise of searching for fruit or plant disease.

Fees and other taxes on incoming trucks are often designed to prohibit rather than to grant privileges. On a 5-ton truck they range from \$30 to \$400.

These are only a few of the many highway barriers. At no place in the Union can a truck cross from one side of a State line to the other without encountering many new and often harassing laws and regulations.

On this subject Attorney General Robert H. Jackson, addressing the National Conference on Interstate Trade Barriers said:

These discriminating regulations have caused what are described as border wars between States, some of which have smoldered for years with occasional violent outbreaks and some of which have flared up for a few days and then died out completely. Some of them have involved harassment, by State officials, of foreign motor carriers. The Secretary of Agriculture has reported 13 of these border wars in which the powers of the States were used either to discriminate against foreign motor carriers or in retaliation for such discrimination, with serious economic loss. Under the so-called port of entry legislation, some States have set up checking stations where incoming, and in some cases outgoing, traffic is halted in order to check up as to equipment, inspections, and taxes. Such a system is more than faintly reminiscent of the intolerable halting and examination which one encounters at every border of a State or municipality in Europe, and which has done so much to disintegrate European economy and bedevil European good will.

Twenty-six of the States have provided a license fee or some penalty at the border or port of entry of the State for trucks entering the State.

3. Other tax and regulation barriers:

The "use" tax is now levied by many States on goods imported; sixteen of the 48 States have such a general "use" tax. These states are, Alabama, Arkansas, California, Colorado, Iowa, Kansas, Louisiana, Michigan, Mississippi, North Carolina, Ohio, Oklahoma, South Dakota, Utah, Washington, and Wyoming.

The oleomargarine tax is imposed by 30 of the 48 States; Alabama, Arkansas, Florida, Georgia, Kansas, Maine, Minnesota, New Mexico, North Carolina, North Dakota, Oklahoma, South Carolina, South Dakota, Texas, and Wyoming have a tax of 10 cents per pound; Washington and Wisconsin 15 cents per pound; Louisiana 12 cents per pound; Delaware, Illinois, Indiana, Maryland, Michigan, Missouri, Nevada, New Hampshire, New Jersey, New York, Ohio, Oregon, Pennsylvania, Rhode Island, Virginia and West Virginia have no tax on oleomargarine. A few States tax only the manufacture of this article.

Forty-one of the States have enacted general preference laws, giving to residents of the States some preference over others that might come in from some other States to do the same kind of work. Thirty of the States give a preference to State products. Twenty-four of the States give a preference to the State on all public printing.

Ten States have passed retaliatory liquor laws. These States are Alabama, California, Connecticut, Delaware, Florida, Indiana, Kansas, Michigan, Missouri, New Jersey, Ohio, Oregon, Pennsylvania, and Rhode Island.

Thirty-one States provide for differential fees (restrictions on imports and nonresidents.)

Thirty of the States have certain restrictions upon the shipment of livestock from other States into their own, some reasonable, while others are not so reasonable.

Fifteen States have restrictions of the shipment of eggs into their State. These States are: Arizona, California, Colorado, Florida, Georgia, Idaho, Illinois, Iowa, Louisiana, Minnesota, Montana, North Carolina, Oregon, South Carolina, and Washington.

Every State in the Union except North Carolina requires licensing and inspection of nursery stock.

All of the States have laws giving them power to quarantine and destroy nursery stock.

Registration of salesmen of nursery stock and dealers of such is required in 26 States.

State-enacted trade barriers have been created under four types of powers:

1. The power of taxation.
2. The State's police power in the protection of health, which includes the power to quarantine and to impose embargoes.
3. The general regulatory powers in the interest of public safety and morals.
4. The sovereign proprietary powers in regard to conservation of natural resources and ownership of public works and property.

Below we list some of the interstate trade barriers created by Federal laws and regulations:

1. First there is the almost prohibitive Federal oleomargarine tax, favoring other sections but detrimental to the cotton-producing States.

2. The monumental trade barrier, however, in all the Nation, and one for which the Federal Government must accept full responsibility, is the one created by our freight-rate structure.

House Document 264, Seventy-fifth Congress, first session, compiled by J. Haden Alldredge, now a member of the Interstate Commerce Commission, and its supplement, House Document 271, Seventy-sixth Congress, first session, present a graphic story of freight-rate discriminations in America that has neither been denied nor justified. More by accident than design the country has become divided into five rate zones:

1. Zone 1, otherwise known as the eastern or official zone, comprises roughly that territory east of the Mississippi and north of the Ohio.

2. Zone two, the southern zone, is the territory east of the Mississippi and south of the Ohio.

3. Zone three, the western trunk-line zone, embraces roughly the territory west of the Mississippi to the Rocky Mountains and north of Oklahoma and Arkansas.

4. Zone four, the southwestern zone, embraces Texas, Oklahoma, Arkansas, and Louisiana.

5. Zone five, the mountain Pacific zone, is composed of the Rocky Mountain States and those west.

The rates south of the Ohio River and in the southern zone are 40 percent higher than north of the river.

In the western trunk-line zone they are 47 percent higher than in the eastern or official zone.

In the southwestern zone they are 75 percent higher than in the eastern zone.

In the mountain Pacific zone they are 71 percent higher than in the eastern zone.

We quote here three short paragraphs from the first document cited:

It is the task of a transportation system to carry all commodities from points of production to consuming centers throughout the continent and to seaports for export. The more freely and cheaply they are carried, the higher the standard of living that can be attained.

On the other hand, the maintenance of a high standard of living requires the wise use of natural resources; it necessitates reasonable economic security of a stable nature for the people in each region through proper diversification of activities. Millions of people, as previously indicated, are distributed over the country irrespective of the location of natural resources, and it would require generations for all of them to move to centers of mass-production industry and specialized agriculture, assuming it possible to persuade such millions to migrate or that it would be wise to do so even if it were possible. There are also established regions of specialized one-crop agriculture whose people must face readjustments to restore and protect their land and to diversify their sources of livelihood.

One of the basic principles of rate-making for transportation purposes, therefore, should be the prevention of rate barriers against regional or territorial development. Discriminatory or preferential rates unduly favoring some regions or territories as against others will surely operate to lower the future living standards of the American people by interfering with economic readjustments which are necessary for the national welfare.

We quote three further paragraphs from the supplemental document:

Those who welded the indissoluble union of States found that the policy of creating a national commerce and protecting it from artificial barriers was the touchstone of the birth and growth of a nation. Allegiance to that fundamental policy today demands the adjustment of these regional freight-rate structures to remove discrimination which obstructs and distorts the flow of commerce and inhibits a natural economic development of the national resources.

There are substantial reasons for achieving in this field of transportation a more rational economic pattern symmetrical with our time-honored predilection for a free national market.

This regional rate discrimination penalizes substantially the present and potential movement of processed goods from the South and West, thereby discouraging the expansion and diversification of industry natural to those areas. A plea for equalization is more than a demand for regional justice. It is part of the struggle for national unity and economic stability.

There is ample evidence that many new industries would spring up almost simultaneously with a proper leveling off of freight rates. Aside from the tremendous impetus it would give to the South and West as regions, it would mean increased business and more employment for the railroads themselves.

The statements quoted from these documents have been sustained and confirmed by the Interstate Commerce Commission itself. The Southern Governors' Conference filed with the Commission, early in 1939, Case No. 27746, thereafter known as *State of Alabama et al. v. New York Central Railroad Company et al.* It was decided on November 22, 1939, subsequently reopened in part, and a final decision handed down on March 5, 1940. The complainants charged that the railroad companies had set up discriminatory rates, almost doubling in some instances rates on manufactured articles originating in the South; in other words, that the rail rates as set up favor manufactured articles originating in the North and shipped southward and virtually preclude the shipment of manufactured articles originating in the South and shipped northward. The Interstate Commerce Commission found that these charges were true as regards some particular items included in the complaint and ordered reductions. The Commission fixed the rates in fact and said concerning them, quoting from the supplemental decision:

That the rates on each commodity named in the following table from shipping points thereof in the South names in the appendix to destinations in the North are, and for the future will be, unduly prejudicial to said shipping points in the South, to the traffic therefrom, and to the shippers of such traffic, and unduly preferential of shipping points of the same commodity in the North, of the traffic therefrom, and of the shippers of such traffic, to the extent that they exceed, or may hereafter exceed, rates made the same percentage of the constructive first-class rates, determined as described in finding numbered (1), from said shipping points in the South to each destination in the North as the rates generally applicable on the same commodity from shipping points thereof in the North to such destination are of the first-class rates which were in effect on November 22, 1939, from and to those points.

It made a similar finding regarding certain other carload rates and ordered similar reduction.

It is observed that this case cost the South more than \$100,000 and that, although it definitely paves the way for future reductions, it is manifestly unfair for the railroad companies to maintain such rates and for the parties injured thereby to be forced to spend such vast sums and carry the burden all the way in order to obtain the very equities which the Interstate Commerce Commission was set up to guarantee.

It is our conclusion that perhaps there is no other one cause that is today contributing more to the Nation's unemployment rolls than freight-rate discriminations.

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III

Interstate trade barriers created by monopolistic control in commerce and industry, are, in our opinion, Mr. Chairman, in many instances most detrimental to the general welfare. They retard growth, diminish purchasing power, unduly increase prices, and thus add vitally to the causes of unemployment. However, inasmuch as there is a special committee on unemployment we shall not further invade the field of its function here except to make a recommendation at the conclusion of this report.

THE GENERAL EFFECT

President Roosevelt, writing Gov. Robert L. Cochran, president, the Council of State Governments, April 1, 1939, had this to say:

MY DEAR GOVERNOR: I am immensely pleased to know that the Council of State Governments has called a National Conference on Interstate Trade Barriers, to meet in Chicago in April.

Long known as the world's greatest single free-trade area, much of our country's commercial importance has been due to the mobility of trade throughout all the States. The last few years have seen the rise of virtual tariff barriers along State lines—damaging restrictions that have hindered the free flow of commerce among the several States. Business, agriculture, and labor have all suffered because of State and regional discriminatory measures adopted in the vain hope of protecting local products from the hazards of economic fluctuations.

Interstate trade barriers have arisen in many instances from the same causes that resulted in mounting tariff walls between nations—accountable for so much of the world's unrest in recent years. The Federal Government is seeking to break down trade walls between this and the other nations of the world, and to remove the hampering restrictions that have been placed upon world commerce.

Interstate trade barriers, if allowed to develop and multiply, will, however, constitute social and economic problems even more serious than international tariffs. It is a matter which demands the immediate attention of all the people of our country, and it is my earnest hope that the several States meeting in Chicago will take effective steps toward the removal of all barriers to the free flow of trade within our Nation.

Very sincerely yours,

FRANKLIN D. ROOSEVELT.

But the cumulative result of all these barriers has been to destroy to a great extent free trade.

"Thus," says James Harvey Rogers in his article, *From State Rights to State Autocracy* appearing in *Harpers*, November 1938, "under the impetus of depression conditions and under the impact of lobbies supported by powerful pressure groups, State legislators today are busily destroying the chief economic basis of our national unity. Certainly it was the view of the framers of our National Constitution that interstate barriers to commerce were to be eliminated. However, the United States Supreme Court—supposedly the chief bulwark of our American system against all enemies—in its dogged attachment to words and to rationalization, rather than to substance, seems to be putting its stamp of approval on the wrecking movement. Thus, the chief influence in the unparalleled economic development of the United States and in its usual high prosperity above that in other enlightened countries is apparently on the way to being destroyed."

We are forced to the inevitable conclusion that these interstate trade barriers have contributed and are contributing materially to the Nation's public enemy No. 1—unemployment.

We realize that many of the barriers will have to be solved by cooperative effort between the States, and between the States and the Federal Government; however, we do believe there are certain definite steps which the Congress could and should take now.

We desire before submitting our recommendations to congratulate the Department of State, the Governors of the several States, the

council of State governments, and the American Bar Association on the progress they have already made in eliminating interstate barriers through reciprocal agreements.

OUR RECOMMENDATION

Therefore, we your committee appointed to study interstate trade barriers and their relation to unemployment recommend, Mr. Chairman:

1. That this Congress amend the Federal Aid For Highways Authorization Act to provide that after the next regular meeting of its legislature no State shall participate in said fund which shall not have adopted the uniform weights, measurements, and specifications for all motor vehicles which shall travel Federal-aid highways, as set up in said act, and until it shall have enacted uniform licenses as proposed therein, and until it shall have enacted the uniform highway code as provided therein. That this Congress provide such uniform law, but provide that a motor-vehicle license issued in one State shall be good in all States, subject only to regulations of the Interstate Commerce Commission as applied to vehicles engaged in interstate commerce; and provide that such legislation shall take into account the debt obligation of the several States.

2. We recommend that this Congress enact legislation to provide that the Interstate Commerce Commission be authorized and directed to institute an investigation into the rates on manufactured products between points in one classification territory and points in another such territory, and into like rates within any of such territories maintained by common carriers, subject to part I of the Interstate Commerce Act, for the purpose of determining whether said rates are unjust and unreasonable or unlawful in any other respect in and of themselves or in their relation to each other, and to enter such orders as may be appropriate for the removal of any unlawfulness which may be found to exist; provided, that the Commission in its discretion, may confine its investigation to such manufactured products and the rates thereon as shippers thereof may specifically request be included in such investigation. And it is further recommended that section 3-1 of part I of Interstate Commerce Act be amended to include the words, "region", "district", and "territory."

3. That the Congress enact legislation providing that upon the request of Governors of two or more States the Department of State shall offer its services toward assisting such States in arriving at agreements, pacts, or understandings designed to prevent or eliminate threatened or existing barriers between the States.

4. Lastly, while the committee realizes that many monopolies existing in this country add substantially to the causes of unemployment, yet inasmuch as you have a special committee, Mr. Chairman, studying monopolies, this committee feels that it should, and it does, hereby adopt the report of your Committee on Monopolies and its recommendation as a part of this report and recommendation insofar as same may apply to interstate trade barriers.

CLYDE T. ELLIS.
JOSHUA L. JOHNS.
SAM C. MASSINGALE.

REPORT OF THE COMMITTEE ON YOUTH AND UNEMPLOYMENT

We of the Committee on Unemployment and Youth believe that keeping the youth of our Nation engaged in some regular activity is one of the most important questions of the day. Check-ups on the matter of unemployed youth indicate that young persons between the ages of 16 to 24, who are out of school, able to work and desirous of obtaining employment but unable to obtain it, constitute about one-third of the total youth population. This unemployed group seems to be almost equally divided between girls and boys. About one-fifth were found to be under 18, two-fifths between 18 and 20, and two-fifths from 21 to 24 years of age. About a quarter of the group had left school at completion of the eighth grade and a fifth on graduation from high school. The unemployed young persons who had never had work had a better education, measured in terms of school-grade attainment, than the others who were without jobs. The unemployed youth had been out of school from a few months to 10 years or more. Almost all who had never had work, and a large proportion of the others, had left school at a time when they were faced with the fact of scant likelihood of their getting a job. Even so, 75 percent of them had left without completing high school. As far as this group is concerned it seems likely therefore that programs emphasizing a return to school for regular high-school or college courses would be acceptable in a very few cases.

One of the first matters to be considered for the youth and its engagement in some activity would naturally be the question of education and the guidance of our youth. It is our belief that in times of economic stress more rather than less education is needed. We therefore agree with the report of the Educational Policies Commission in many of its recommendations. We believe that every American child should receive a minimum of 10 years of education, said education to include the fundamentals and in addition some instruction in mechanics and mechanical skills. Having made 10 years of education the minimum we desire to report that we agree with the New York State suggestion, which was that education should continue to that age where a boy or girl can get a job and keep it. This would entail possibly 15 years of education, and it should be arranged so as to give our youth more vocational guidance and business training than they are today receiving. Any child needing financial assistance to secure the 10-year-minimum education should receive that help, whether it be in the nature of transportation, medical care, food, shoes, or any services of that kind. In addition, any child showing capability to use further training to good advantage should receive similar assistance to proceed beyond the 10-year minimum to the 15 years above mentioned.

We have naturally considered and worked for the field covered by the N. Y. A. which has been of such great assistance during recent

years in the matter of keeping our youth in school. We believe that this assistance should be continued—that it makes our youth appreciate the value of an education, at the same time teaching them to use their hands in support of themselves. These N. Y. A. grants are of great value in the conservation of human resources. The boys and girls that receive this training are the leaders we must have for the future. Cooperative, part-time programs in diversified occupations in connection with education should be established in more of our communities; and it must be remembered that the Government is already advancing a part of the money needed in this type of work. We believe that the Government should give whatever grants-in-aid are needed to enable the States to provide adequate education to all the children of our land.

The C. C. C. is another governmental project which our committee heartily endorses for the benefit of the youth of the country. It takes these lads off the street corners, out of pool halls and other places of that type. It allows them to receive the benefits of regular hours of eating and sleeping, as well as the advantages of outdoor life. While thus assisting them physically it accomplishes improvements for the community in which any camp is located and allows these lads to assist in the support of their families. Our suggested changes for the C. C. C. would be to have certain camps include a specified number of hours per week for military training and to have other camps devote a specified number of hours each week to vocational training, the choice in each case to be made by the enrollee.

Turning to the farm: Organizations such as the 4-H Clubs and cooperative groups of that nature, to properly instruct our youth along agricultural lines—aid all youth interested in agriculture. Here again we must call attention to the fact that wages that can be paid by the farmer cannot be compared with those paid by industry. Thus it is only natural that many of our younger people frown on farm work, forgetting the fact in many cases that they are benefited by the outdoor employment and, what is more important, that their employment usually includes their keep (board, room, laundry, on any other sort of job are indeed big items). In view of the special character of the agricultural problem the committee feels that measures should be taken toward organizing general and vocational education for young agricultural workers. This could be handled very well in the schools of the rural districts. And the committee also feels that the Government should encourage the creation and development of agricultural cooperatives.

With the personnel and employment managers of industry requesting and demanding skilled labor for the past 10 years or more it was only natural that there would come a time when no more skilled labor would be available. I know from personal experience that for many years these employment managers have been asking for a certain type of worker, with so many years' experience, and that they were not willing to take any mechanically inclined youngster, or one who had had vocational training, as an apprentice. For this reason we have now reached the point above named, and the Youth Committee believes that the real means of furnishing this Nation with skilled labor is now through the medium of the youth. We therefore favor the installing of every possible phase of vocational training in our schools, in the N. Y. A. program, and in the C. C. C. camps, to assist in properly supplying us with youth who have a foundation and who with a little

additional experience would rapidly become skilled laborers. There was a time in the past when an applicant for a position was appreciative of his opportunity of serving as apprentice at a somewhat lower wage than others in the plant. This same applicant in those days advanced along the line until after about 4 years he was rated as a mechanic or as a skilled laborer rather than as an apprentice, and his wages were treated accordingly. During recent years there has been no apprenticeship in most plants, and youth entering industry has demanded the same pay as the skilled workers in that industry. This should be broken down, and apprenticeship should be properly and justly handled so as to assist in bringing about a proper number of skilled laborers. The next step would naturally be to have industry cooperate and use these lads who have taken vocational training at various places, giving them an opportunity of putting their training into practical usage. We believe that this would not only assist the youth-unemployment question, but at the same time it would assist industry; and there would not be a shortage of skilled labor. The only other method would be by regulation of apprenticeship, such as above referred to as being in existence some years ago.

Our recommendations therefore are:

1. A minimum of 10 years' education and raising the school-leaving age to 16 years of age, at the same time prohibiting employment of children under 16 years of age.
2. Continued education for children showing capability to use same to good advantage, to a point reaching 15 years of education.
3. Financial assistance to children needing same during these years of education.
4. Establishment of cooperative, part-time programs in diversified occupations in various communities.
5. Continuance of the N. Y. A. and the giving by the Government of grants-in-aid needed to enable States to provide above adequate education to all the children of our land.
6. C. C. C. camps to include a specified number of hours per week both for military training and for vocational training—choice to be made by the enrollee.
7. Measures toward organizing general and vocational education for young agricultural workers.
8. The Government to encourage the creation and development of agricultural cooperatives.
9. Further development of vocational education.
10. Regulation of apprenticeship, providing (1) regular promotion of apprentices, (2) progressive increase in wages, (3) adjustment of number of apprentices to trained workers in the same enterprise, and (4) recognition of the principle of equal pay for equal work.

We believe that a careful study of all of the above recommendations will meet with the approval of the entire membership of the Unemployment Committee of the House of Representatives.

Respectfully submitted.

PIUS L. SCHWERT, *Secretary.*
JED JOHNSON, *Chairman,*
WILLIAM W. BLACKNEY,
EDWIN A. HALL,
GERALD W. LANDIS,
JAMES G. SCRUGHAM,
Members of the Committee.

YOUTH AND UNEMPLOYMENT

Before the depression, this country had an income of over \$80,000,000,000. As we look back upon those days, it seems, in view of our struggles today, that we must have been riding high on the swell of prosperity in the 1920's. The facts are—and Government figures will bear me out on this point—that even in 1928 and 1929 we were nowhere near using our full plant capacity. The great mass of incomes, even in those years, were not sufficiently high to enable most Americans to buy and use all the goods and services which should have been available to them, in view of the American standard of living.

Today, we are painfully aware that something is vitally wrong, because the unemployment problem has been steadily growing worse. Yet nothing basic, nothing real, has been done to solve that problem. Our national income continues to stagger along slowly in the lower brackets. Our increased population has been largely an increase of men and women of working age.

I am drawing upon personal experiences of 16 years as a high-school teacher to tell you that the principal cause of unemployment and low national income today is that the young people of our Nation are leaving school without being fully prepared for definite jobs. I have known this for many years and have constantly urged such revision of our public-school system as will provide a real system of vocational guidance and training.

High productivity and adequate education go together. All economists agree that this is true. But we must not simply blindly increase the amount of education which we will offer to the youth of our land. Each boy and girl presents a different and unique personality. Capabilities vary. There are some who should have all the advanced training obtainable in this country. There are a larger number who can use to advantage at least 2 years of training beyond high school. I agree heartily with the Educational Policies Commission that the boy or girl of average ability in this country today should have the advantages of junior college, with particular emphasis placed on vocational training during the last 2 or 3 years of schooling. The rule that boys and girls should be trained for definite jobs and be ready to fill these before they leave school is a rule which we should adopt without delay.

Today there is a shortage of skilled labor in many industries. There is likewise a shortage of many types of goods and service which can be produced only by skilled labor. The more highly skilled workers we have in this country, the more money we shall have. This is true both because the average personal income will rise with an increase in skilled labor and because our productivity snowballs as a result of training and knowledge. This does not mean that unskilled labor is unnecessary to us. Probably our whole system would collapse without some workers who offer unskilled manpower of the strictly brawn type. But we have too many laborers who are untrained and unskilled.

Among what class of workers is there greatest unemployment today? You know the answer. By far the greatest proportion of them are unskilled. Yet there is little chance, as things stand, to increase our numbers of skilled workers unless we increase education and plan it

very carefully. A high output per worker is associated with a high level of education, vocational intelligence and skill—never the reverse.

Vocational guidance and training is a topic widely misunderstood today. It is not something totally distinct and separate from basic education, but is a training which should proceed side by side with the study of reading, writing, arithmetic, civics, and science. Even in the primary grades prevocational training should begin with the cultivation in the child of good work habits—concentration, punctuality, neatness, and care of tools. In later grades, when the pupils are learning something of employer-employee relations and facts about the workaday world, as they should be in the ideal set-up, they should be likewise becoming proficient in certain mechanical skills. We cannot neglect science or mechanical skills in the schools of today, because this world in which we live is increasingly dependent on science and machinery, and so are all of us who live in it.

Eventually, in the ideal school set-up of today, there should come a time when the pupil should consult with his vocational adviser to decide "in just what job will I be happiest and most productive?" Together pupil and teacher must then determine the definite preparation which the student must receive.

Here we come to a vital point. We do not want to train children for jobs that are today overcrowded or poorly paid. How may we know what are the opportunities today, and what the opportunities will be tomorrow?

Everybody today wants to know where the good jobs are, where there are promising openings for a greater number of workers.

Once the schools have this information they will know better how to proceed in the matter of providing more semiskilled and highly skilled workers.

Our problem is one of raising incomes so that we may have widespread distribution and consumption of goods and services, which we now have the plant capacity to produce. There is but one way to raise incomes, and that is to increase the numbers of our highly skilled and semiskilled workers. How can we increase our numbers of highly skilled and semiskilled workers? Industry and labor may help on this program by developing adequate apprentice systems. Industrial schools, night schools, N. Y. A., C. C. C. camps, and other governmental agencies may do their share. But on the public schools and colleges inevitably falls the largest share of responsibility for turning out graduates who have mechanical skills and training for work which pays good financial returns, because it is training which has increased productivity.

Employers are always interested in prospective employees who furnish lists of skills in which those seeking work are efficient. I believe that there will always be a demand for good welders, mechanics, printers, carpenters, painters, bricklayers, plumbers, cooks, bakers, tailors, operators of business machines, statisticians, office managers, business administrators, laboratory assistants, and so on. But we must have more knowledge of industry's needs, demands, and requirements as of today and as of tomorrow if we are to proceed with intelligence. We Americans are a strangely stubborn people at times. Faced with this colossal illness called unemployment, we have tried to cure it with sugar-coated pills instead of seeking out the basic cause of sickness and finding a cure which is a cure. The educational

cure is not a quick cure. We may only just begin to see results 5 years after we have taken steps to revise and improve our school system. Yet we must take the long view. We must think ahead to 1945, 1950, 1960. No nation was ever so poor that it could not afford good public education. Our public schools are far from being adequate today. We have even cut school budgets severely. In 1936, public education received only 14 percent of the Nation's expense budget, as compared to 22 percent in 1930. This reduction was made in the face of a greatly increased school enrollment, due in large part to the unemployment of our youth. In other words, many hundreds of thousands of additional children have been clamoring for instruction, and there has been less money than before with which to do the job.

Education is not the sole answer to a renewed prosperity. It is, however, a vitally important basic step in the right direction. There are figures and studies available showing conclusively that those States which spend the most for education now will have the greatest per capita wealth in years to come.

The time has come to reinvest in education, because it is such an important tool for establishing economic security. The time has come to cease drifting and to face realities. The time has come to put out money where it will do most good in banishing forever the scourge of 1940—unemployment.

By Hon. GERALD W. LANDIS, M. C.,
Indiana, Seventh District.

Mr. Chairman, wherever it appears to reduce production, there artificially high prices for agricultural products will be maintained due to state law and to monopoly control, and probably even more due to the inflated official representations made more than to those of the persons who have for far too little of a per capita income, such as the Negro, the female, etc.

A short-sighted and shortsighted law policy. Federal and state legal action against one another and the states, however, calculated on states tax practices. The farmers have not been bear no relation whatever to the income and they neither bear in a year of complete crop failure than in one of bumper crops.

Our taxes are not designed to encourage initiative and enterprise but on the contrary, they encourage stagnation of the economy. Our tax system does not take any account of the importance of encouraging the following in one of the most important industries. Great importance must be given to the tax system. Finally, our present tax system does not take into account the principle of ability to pay.

A low farm income. The farmer should own some of the market for industrial goods but cannot do so as he can not

THE JOURNAL OF

FINAL REPORT AND PROGRAM OF THE HOUSE CONFERENCE ON UNEMPLOYMENT

The conference takes the position that unemployment is the central and typical economic problem of the twentieth century, that there is not an unlimited time left in which to effect its solution, that the future of individual freedom and of constitutional government depend directly on its solution, and that we should proceed at once to a consistent, determined, and coordinated attack upon unemployment.

The causes of unemployment can be listed as follows:

1. Failure of the Nation to maintain a scientific balance between the increase in production of goods and services and the expansion of the volume and velocity of its medium of exchange.
2. The violent and perverse expansion and contraction of public and private debt.
3. The fact that of the 15 to 20 percent of the national income which is annually saved a considerable proportion has been held out of use—neither spent nor reinvested. This constitutes one of the primary reasons why industry and agriculture cannot function on a reasonable capacity basis and cannot consistently recover their costs of production of goods out of the current market.
4. Technological change and the introduction of machinery without compensatory reduction in the prices of goods produced. Monopolistic controls and administered prices are a principal cause for the failure of prices to come down.
5. Monopoly, wherever it operates to reduce production and maintain artificially high prices for its products. This means much unemployment due to direct lay-offs by monopoly controlled industries and probably even more due to the indirect effect of having the monopoly take more than its share of the consumer's dollar, leaving far too little of it for competitive industries such as agriculture, textiles, etc.
6. A short-sighted and unscientific tax policy. Federal, State, and local taxes overlap one another and in neither case are the levies calculated on sound tax principles. The farmers, taxes, for example, bear no relation whatsoever to his income and may indeed be heavier in a year of complete crop failure than in one of comparatively good returns.
7. Our taxes are not calculated to encourage initiative and investment, but on the contrary, they encourage purchase of tax-exempt bonds. Our tax system does not take any account of the importance of discouraging the holding out of use of large accumulations of liquid funds. Great loopholes exist in our tax laws.
- Finally, our present tax system does not take sufficiently into account the principle of ability to pay.
7. Low farm income. The farmer should offer one of the greatest markets for industrial goods but cannot do so as long as he receives,

as a class, as cash income, only 6.6 percent of comparable national income while constituting some 25 percent of the population.

8. Loss of farm ownership, corporation farming, and the rapid introduction of machine methods into agriculture.

9. Exhaustion of natural resources, notably the top-soil in many parts of the country.

10. The existence of innumerable barriers against the free flow of commerce among the several States.

11. Failure of Congress to develop a long-range, scientifically financed public-works program which would be effective in the future as a stabilizer of employment or to prosecute such program as we have had with sufficient skill to actually stimulate private employment.

12. Remarkable increase in span of life and failure of Congress to provide adequately against destitution and dependency for people of advanced age in the Nation.

PROGRAM FOR THE SOLUTION OF UNEMPLOYMENT

As a result of the work of the subcommittees of this conference and based upon their findings, we recommend the following program for the speedy reduction and ultimate elimination of unemployment in the United States:

1. Assumption by Congress of its constitutional right and duty to "coin money and regulate the value thereof" and the establishment of a scientific tax program and a scientific monetary and credit system.

2. Passage of legislation to establish a national old-age pension retirement system for all groups operated on a pay-as-you-go basis and financed in part at least by inheritance and income taxes.

3. The granting of such appropriations to the antitrust division of the Department of Justice as it may be able to effectively use in breaking up monopoly control of prices in the United States, with particular reference to those brought about by technological improvements.

4. Passage of legislation to assure the substantial passing on of benefits from technological improvements either to consumers in the form of lower prices or to other workers through reinvestment of savings effected.

5. (a) A legislative prohibition against the issuance of any more tax-exempt securities and the requirement that holders of presently exempt securities include such income as they may receive from them as part of their income received in computing gross income for income-tax purposes.

(b) Reduction of the exemption now allowed from estate taxes and gift taxes; revision of the individual income tax schedule to provide both a lowering of exemptions and consequent broadening of the base and an increase in the tax rates in the middle and upper brackets; requirements that husband and wife file a joint return in all cases; repeal of consumption taxes to the greatest possible extent, except for the taxes on liquor, tobacco, and luxury items; and as a measure for the discouragement of control of one corporation by another one, reduction of the exemption now allowed on intercorporate dividends payments.

9. (a) Extension of the stamp plan for the disposal to needy people of agricultural commodities and the expansion of the home market for agricultural commodities.

(b) 1. Marked expansion of marketing cooperatives, so the producers may have some voice and control over the sale of their commodities and the prices paid therefor.

2. Elimination of monopoly control of the market for a good percentage of farm products.

3. Elimination of speculative control of farm-commodity prices.

4. Extensive revision and reduction in farm-real-estate taxes, so the same may be adjusted to farm income and ability to pay.

5. It appearing that the protective tariff system is so interwoven into our economic and industrial structure that its repeal would probably be unwise, the farmers of the Nation should either be accorded the same protection for their commodities or until accorded such a direct subsidy should be paid the farmers to compensate them for the extra burden the tariff places on them.

6. Numerous acts of Congress having been enacted for the protection of special groups, either by guarantee of minimum wages or prices, and all of these having increased the cost of necessities to the farmer, he should in return, be guaranteed a price for his commodities of not less than the parity price on the domestically consumed portion of the crop.

7. Passage of legislation to make credit available to farmers at the lowest possible rate of interest and to make possible the refinancing of presently outstanding indebtedness at such rate, as a means of preventing further foreclosures of farms; expansion of available funds and provisions for loans to farm tenants to enable them to buy farms on a sufficient scale to turn back the present increase of tenancy and make for an increase in farm ownership instead; and provision for loans to as many worthy former farm families as possible to enable them to settle on Federal reclamation project lands.

8. A broad program of soil and water conservation including loans at very low interest to farmers to enable them to carry on conservation work on their own lands and also a rural works program in areas where soil and water conservation problems and rural unemployment coincide.

9. Adherence to the policy that all power sites not now in the hands of private owners be retained for development by public agencies.

10. Passage of legislation to set up a long-range public-works program, emphasizing such things as hospital construction, public health work, school construction, antipollution facilities, flood control, highway construction, reclamation and water conservation, reforestation, low-cost housing, and other projects which will promote the general welfare and which are either directly revenue producing or will in future increase property values and the national wealth. Such a program to be used as an employment stabilizer, being expanded in time of rising unemployment and contracted as private employment picks up again. This program should provide that the work be done either by contract or by direct employment by Government agencies whichever method is preferable in an individual case. Insofar as public works are self-liquidating the program should be financed without increase in the public debt.

11. Further reduction in the rate of interest on housing loans to individual home builders.

12. The removal of these barriers created by Federal and State laws and regulations which have the effect of preventing a free flow of trade among several States, and particularly the highway barriers, the freight-rate barriers, and the "use tax" barriers.

13. Passage of legislation providing for Federal grants-in-aid to States to match State and local funds made available to establish in the school systems additional vocational training and guidance to prepare students for work in the skilled and semiskilled occupations in which an actual or threatened shortage of workers exists.

14. Passage of legislation to provide for development of strategic and critical metallic and nonmetallic materials within our own borders. The further purpose of such legislation, aside from relieving unemployment, is the encouragement of private enterprise to relieve this Nation of its dependence upon foreign countries for vital (military) supplies many of which are essential to national defense.

15. The encouragement through appropriate legislation of the cultivation of agricultural products heretofore not growing in the United States (such as rubber) and of new industrial uses for agricultural products.

16. Creation of a regular standing committee of the House on employment.

In addition to the foregoing 16-point program a substantial majority of the members of the conference favored the following additional provision: "The purchase by the Government of the United States of the capital stock of the 12 central Federal Reserve banks."

All but five of the Members of the conference agreed to the foregoing final report and program and well over half agreed to it without any reservation. The remainder agreed to it with minor reservations or with exception as to certain specific points with which they were not in full accord. It can be fairly stated that the final report and program represents in broad outlines an area of agreement upon which constructive future action can be taken toward the solution of the unemployment problem.